ENVIRONMENTAL IMPACT ASSESSMENT

PROPOSED CONSTRUCTION AND IMPLEMENTATION OF AEP KATHU SOLAR DEVELOPMENT NEAR KATHU, NORTHERN CAPE

APPLICANT:
AEP KATHU SOLAR (PTY) LTD

AGRICULTURAL SCOPING REPORT
JANUARY 2016

STUDY CONDUCTED AND

REPORT COMPILED BY: C R LUBBE

Cape Environmental Assessment Practitioners (Pty) Ltd
Reg. No. 2008/004627/07
VAT No 4720248386
Telephone: (044) 874 0365 1st Floor Eagles View Building
Facsimile: (044) 874 0432 5 Progress Street, George
Web: www.cape-eaprac.co.za PO Box 2070, George 6530

AGRICULTURAL SPECIALIST:
C R Lubbe
6 Athlone Street
SWELLENDAM
6740

Contact person: Christo Lubbe
Mobile Phone: +27 82 853 1274
E-mail: macquarrie@vodamail.co.za

TABLE OF CONTENTS

List of Tables

List of Figures

1. INTRODUCTION

Cape Environmental Assessment Practitioners (Pty) Ltd is currently conducting an EIA for AEP Kathu (Pty) Ltd to construct a solar power plant on Portion 0 of the farm 460 Legoko situated 10 km south of Kathu in the Northern Cape. The proposed power plant will be known as AEP Kathu Solar (Pty) Ltd.

The EIA is conducted for environmental authorisation under the National Environmental Management Act (Act 107 of 1998), as amended. As part of this EIA, a study has been commissioned to scope possible impacts of the project on its immediate **agricultural** environment.

2. OBJECTIVES

The objectives of this study were to consider the possibility of temporary and permanent impacts on agricultural production that may result from the proposed construction and operation of the PV Power Plant.

3. APPROACH AND METHODOLOGY

3.1. Desktop Study

A desktop study was conducted to review existing data and literature sources. The desktop review provided a baseline agricultural and land use profile, focusing on the specific geographical area potentially impacted by the proposed project.

3.2. Field Investigation

The site was visited and assessed for land use and agricultural potential. An augering survey was carried out and plotted and soil groups were indicated in uniform polygons.

Potential impacts of the proposed project on agriculture were identified and considered, with particular attention to the following aspects:

- The possibility of permanent loss of high potential agricultural land;
- Impairment of land capability due to construction;
- Veld conditions for grazing;
- Analysis of erosion risks because of possible altered drainage patterns;
- Cumulative effect similar projects

4. ASSUMPTIONS AND UNCERTAINTIES

As far as **regional** information is concerned, this is primarily a desktop-based study. Climatic conditions, land uses, land type and terrain are readily available from literature, GIS information and satellite imagery.

The **site-specific** field studies confirmed most of the desktop findings and I am confident that the findings provide sufficient detail for the agricultural potential study reported in this document.

5. DESCRIPTION OF THE PROPOSED PROJECT

AEP Kathu Solar (Pty) Ltd proposes to construct a Photovoltaic Facility on Portion 0 of the farm 460 Legoko with a 225ha footprint on a farm area of approximately 1368 hectares. For the purpose of scoping, a preliminary focus area of 315 ha was included in the agricultural survey.

The net generating capacity of the plant will be 75 MW. The project will connect into the national grid via the new Sekgame substation (to be situated approximately 1km south of Ferrum MTS).

6. THE POTENTIALLY AFFECTED ENVIRONMENT

This section provides a general description of the immediate environment potentially affected by the construction, operation and closure of the proposed PV power plant.

6.1. Locality

The location for the proposed PV power station is 10km southeast of Kathu in the Northern Cape (see ***Figure 1***). Access to the site is obtained from the Reitzhof A.H. (east) road off the N14 (Kuruman road).

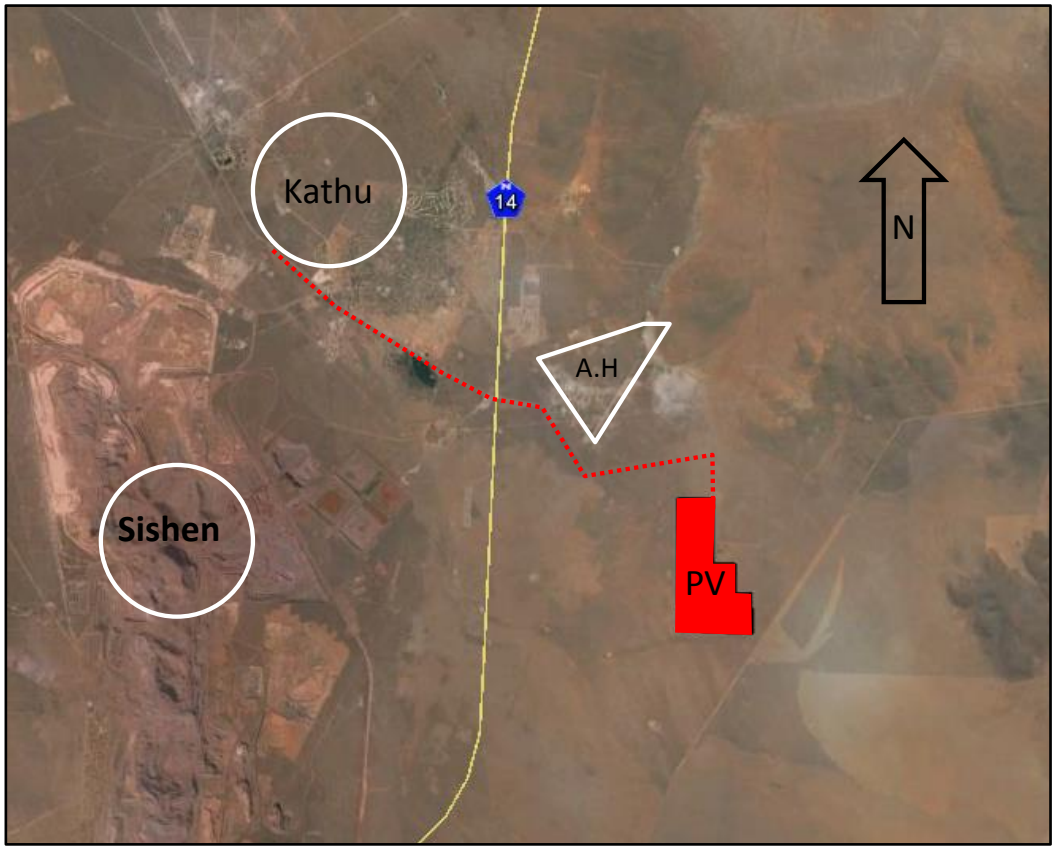

Figure 1: Location of the proposed PV energy facility

6.2. Physical description of site

The total area of the farm is 1368ha and the footprint will be approximately 225ha. The study area is located in the southwestern corner of the farm. See Figure 2.

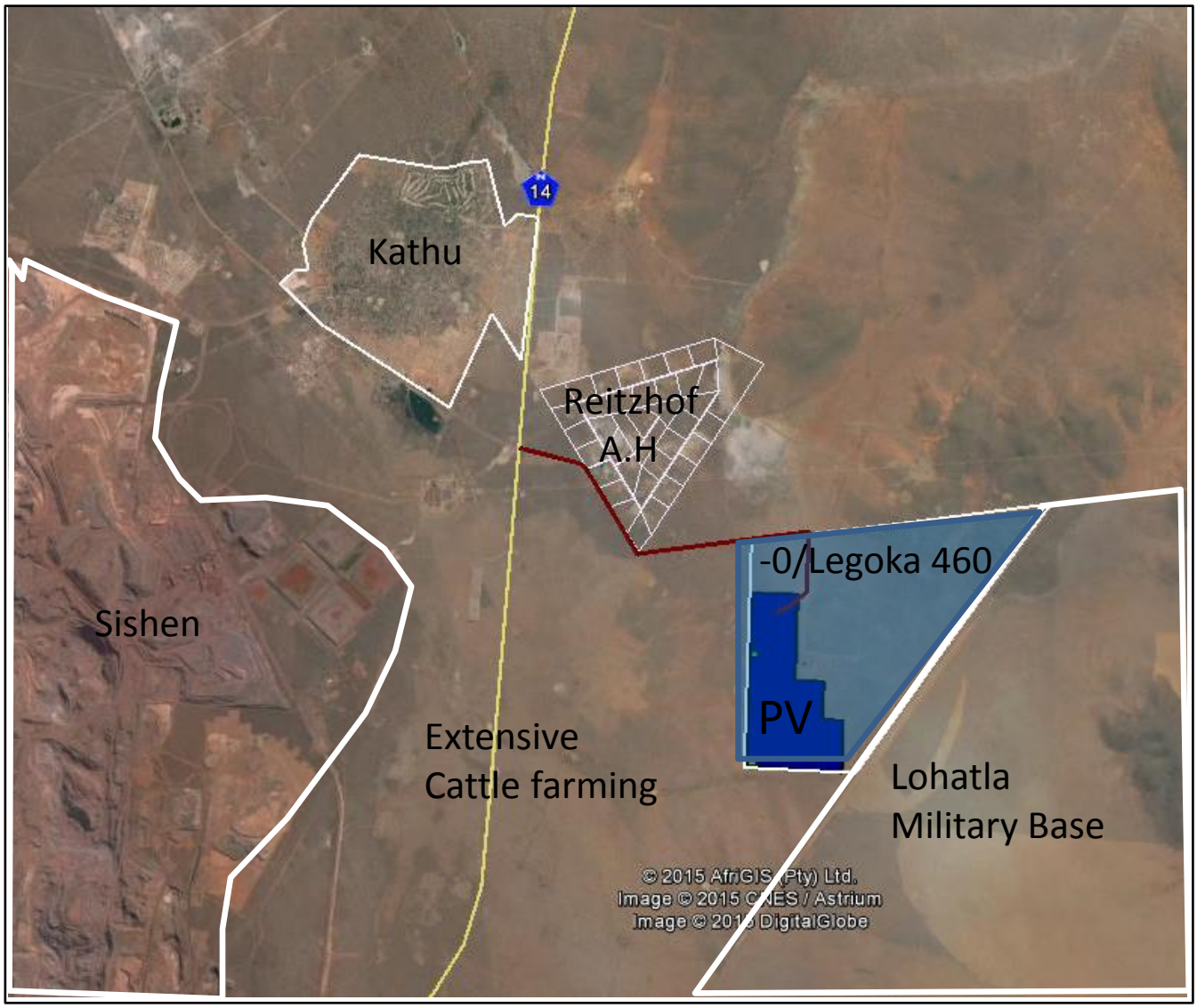

Figure 2: Bordering developments

The site falls in the Kalahari Bushveld Eco zone with savanna vegetation. The dry climate restricts agricultural activities to extensive livestock and game farming. The area is also rich in mineral deposits with mining activities that take place at Sishen less than 10km to the west .Agricultural holdings border the site to the north, while Lohatla Military Base is situated to the east and south.

6.2.1. Geology

The geology is of the Kalahari sequence. Sedimentary and Volcanic rocks of this sequence include dolomite, limestone and chert with red windblown sand of the Tertiary to Recent age. Characteristic of

this geology is the well-developed calcrete or surface limestone with a thin layer (<1m) Aeolian sand blanket.

6.2.2. Climate

The region is classified as a semi-arid zone. The following specific parameters are applicable:

RAINFALL	
Month	**Precipitation (mm)**
January	65
February	74
March	83
April	35
May	15
June	7
July	3
August	5
September	7
October	19
November	24
December	43
Annual	378

Mean maximum temperature	31 to 33^{0}C
Mean minimum temperature	Minus 2^{0}C
First frost expected	11 to 20 May
Last frost expected	01 to 10 September
Hours of sunshine	>80%
Evaporation	2200 2400 mm

6.2.3. Soils

According to AGIS, the predicted land type is Ag 110, which depict a red or yellow high base status soil with effective depth of less than 300mm.

Soils in this region usually show the following characteristics:

- Soils have minimal development, are usually shallow, on hard or weathering rock, with or without intermittent diverse soils.
- Lime is generally present in part or most of the landscape.
- Red and yellow well-drained sandy soil with high base status may occur.
- Freely drained, structure less soils may occur.
- Soils may have favourable physical properties.
- Soils may also have restricted depth, excessive drainage, high erodibility and low natural fertility.

6.2.4. Vegetation

Acocks veld type group	Tropical bush and savannah type(Bushveld)
Vegetation Biome	SVk 12 Kathu Bushveld
NDVI:	Low to moderate
Land capability	Non arable low potential grazing
Grazing capacity	18 – 21 ha/ LSU
Land use :	Livestock and Game farming
Common Trees	Camel thorn acacia (Ae), Umbrella acacias(At), Camphor bush (Tc), Buffalo thorn (Zm) and Velvet raisin (Gf)
Indicator grasses with high grazing value	Silver Wool grass (Aa), Wool grass (Ap) Blue Buffalo (Cc) Gha grass(Cg) Stab grass (As) Feathered Chloris (Cv) Black footed Signal (Bn), Wether love grass (En) Tall Bushman (Sc), Small Bushman (So) Lehmans lovegrass (El)

6.2.5. Topography

The area is essentially sandy Bushveld with a flat to gently concave topography. Level plains with some relief occur. The slope gradient is 0–2%. The 5m contour interval exaggerates the impression of relief, but shows the drainage pattern clearly (see Figure 3). Part of the study is to determine the influence the development will have on the drainage pattern. Separate studies on fresh water ecology and a storm water management plan were undertaken and more details may be obtained from those reports.

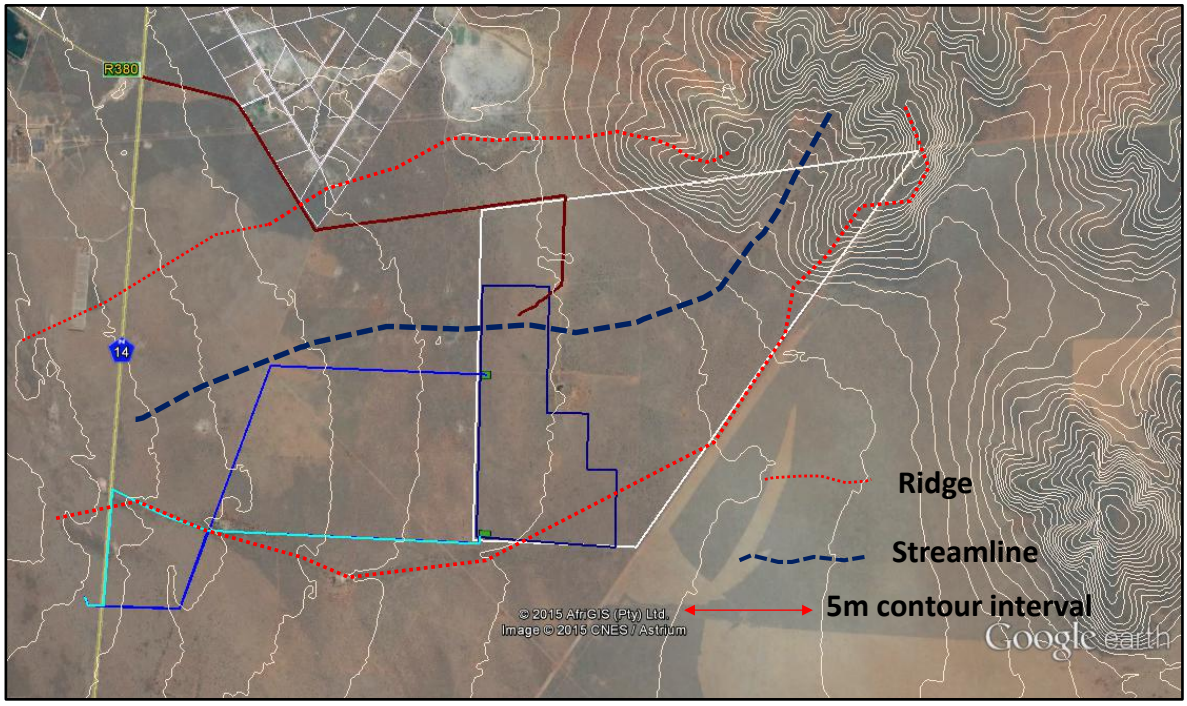

Figure 3: Drainage

7. STUDY FINDINGS

7.1. Infrastructure on the farm

The farm is planned and managed as an extensive grazing unit. There are 15 camps in the 1368ha unit, all more or less 1kmx1km. Each group of four camps has a communal watering camp. See Figure 4.

No cultivation takes place.

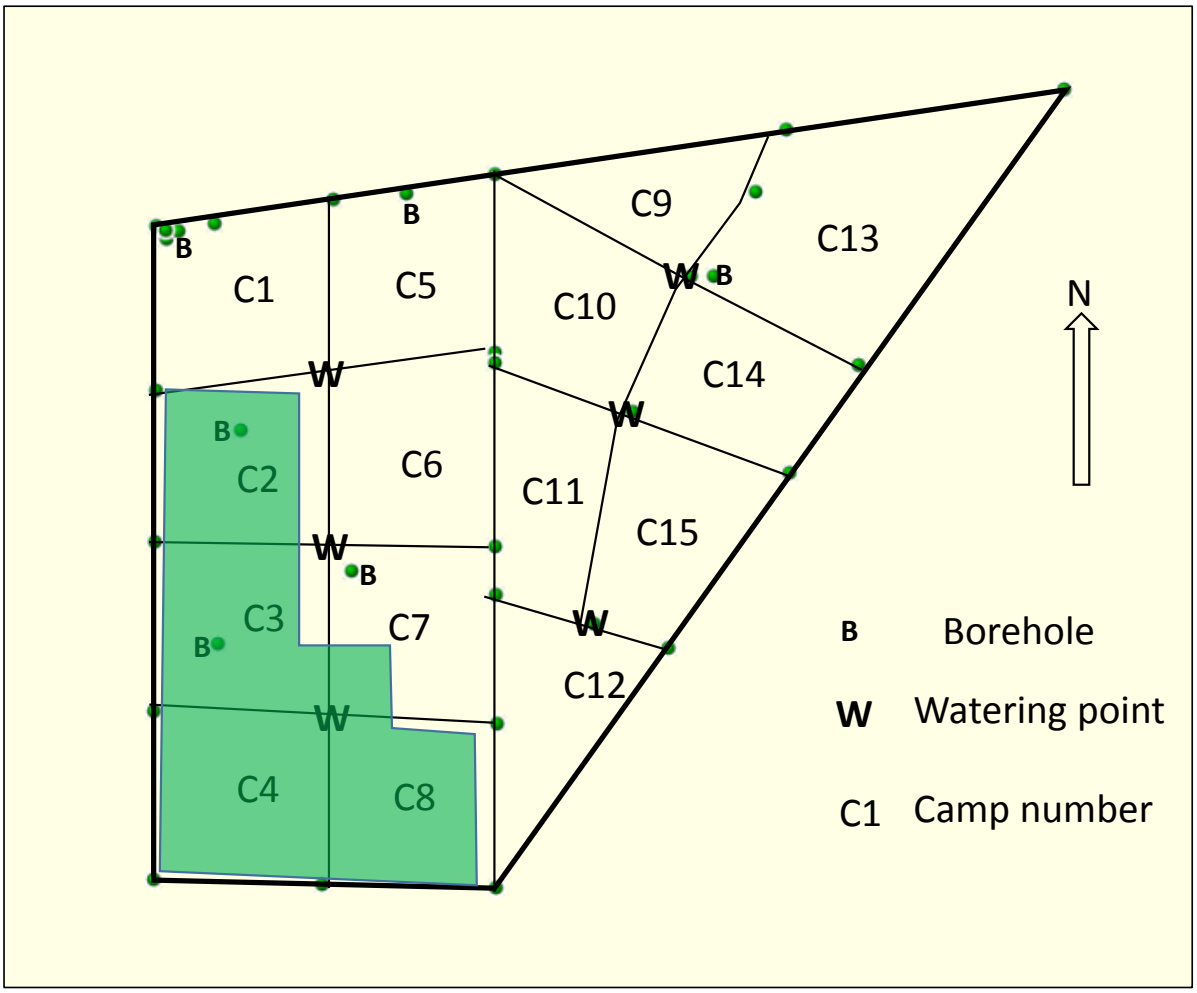

Figure 4: Farm infrastructure.

Structures on the farm include:

- Internal fencing
- Watering facilities
- Home stead (C1)
- Labour housing (C1)

- Non-operational earth dam (C1)
- Ruin of house (C7)
- Cattle handling facilities (C7)
- Large shed (C7)
- Operational boreholes/strong (C1, C7 and C13)
- None operational boreholes/weak (C2, C3 and C5)

7.2. Past and Current Agricultural Activities on Site

The farm is utilised for extensive cattle farming, There is evidence of past cultivation practices with centre pivot irrigation in C5 and earth dam on C1. According to the owner, no cultivation has taken place since 1992.

7.3. Soil Classification

An augering survey was carried out as indicated in *Figure* 5: 5

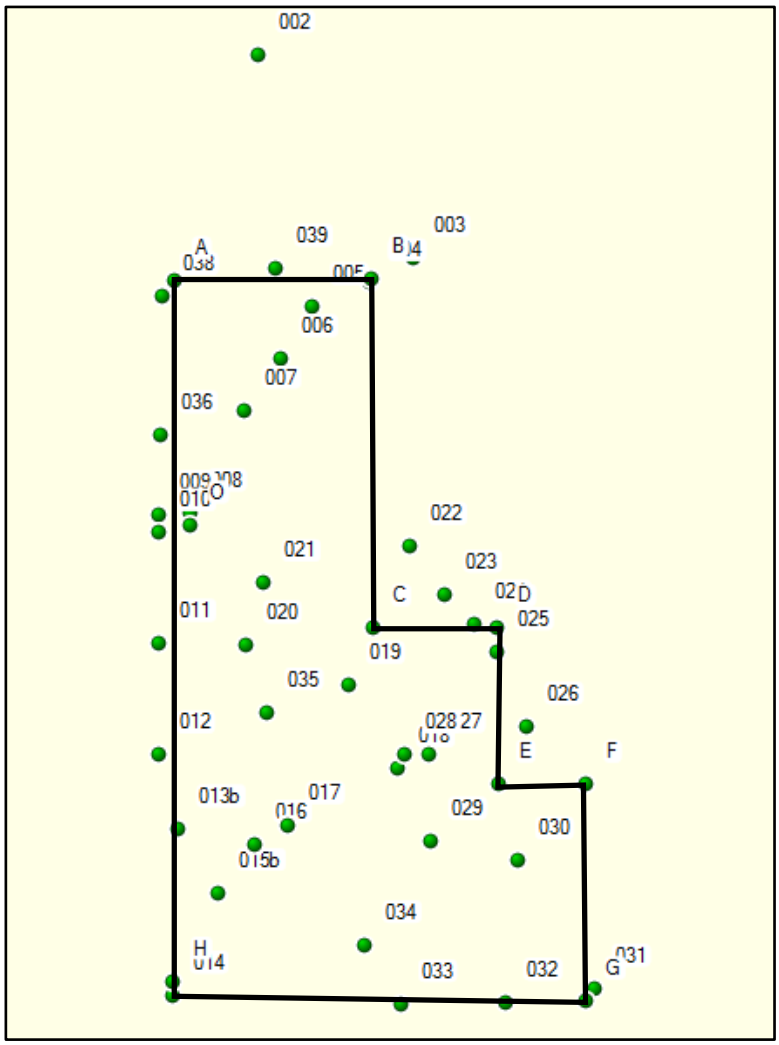

Figure 5: **Augering points**

At each augering point, an observation record was completed. The soil observation records in **Table 1** are representative of the one soil form found on the site. The soil is further described below each observation record.

Table 1: Soil Forms Identified

Clovelly 3100 > 70cm

OBS	3	**COMMENT**		old centre piviot land											
LAT	27 44 35.6	**SLOPE GRAD**		1		**MOISTURE**		L							
LONG	23 07 11.0	**SLOPE SHAPE**		R		**EROSION**		L							
	FORM	Cv	**TSD**	120	**WET**	0	**HOR**	**TYPE**	**DEPTH**	**COL**	**CLAY**	**S-GR**	**CONS**	**STRUC**	**STONE**
	FAM	3100	**ESD**		**C**	I	**1**	**A**	20	7.5YR4/4	6	Vf	5	sg	0
	ROUGH	1	**ASD**		**GEO**	L2	**2**	**B**	120	7.5YR5/6	6	Vf	5	a	0
	TERR_POS	4	**LTN**	So	**PHOTO**		**3**								
	L.COVER/USE:	Old land not used after 1992 grazing													

Not in the site - previously cultivated area (Family setlagole)

0-20 cm brown, sandy (fine grade), with single grain structure topsoil

20-120 cm strong brown, sandy (fine grade), structureless sub soil

Limited > 120cm

Askham 1000 >70cm

OBS	5	**COMMENT**													
LAT	27 44 42.1	**SLOPE GRAD**		1		**MOISTURE**		L							
LONG	23 06 57.0	**SLOPE SHAPE**		R		**EROSION**		L							
	FORM	Ak	**TSD**	40	**WET**	0	**HOR**	**TYPE**	**DEPTH**	**COL**	**CLAY**	**S-GR**	**CONS**	**STRUC**	**STONE**
	FAM	1000	**ESD**	40	**C**	I	**1**	**A**	20	7.5YR4/4	6	Vf	5	sg	0
	ROUGH	1	**ASD**	0	**GEO**	L2	**2**	**B**	40	7.5YR5/6	6	Vf	5	a	0
	TERR_POS	4	**LTN**	h	**PHOTO**		**3**								
	L.COVER/USE:	Veld grass and bush													

Transition from yellow to red soils (Family Aroab)

0-20 cm brown, sandy (fine grade), with single grain structure top soil

20-120 cm strong brown, sandy (fine grade), structureless sub soil 0-70

Limited hardpan carbonate horizon

Hutton 3100 >70cm

OBS	23	**COMMENT**													
LAT	27 45 19.6	**SLOPE GRAD**		1		**MOISTURE**		L							
LONG	23 07 15.4	**SLOPE SHAPE**		R		**EROSION**		L							
	FORM	Hu	**TSD**	120	**WET**	0	**HOR**	**TYPE**	**DEPTH**	**COL**	**CLAY**	**S-GR**	**CONS**	**STRUC**	**STONE**
	FAM	3100	**ESD**	120	**C**	I	**1**	**A**	20	2.5YR4/6	6	Vf	5	sg	0
	ROUGH	1	**ASD**	0	**GEO**	L2	**2**	**B**	120	2.5YR4/6	6	Vf	5	a	0
	TERR_POS	4	**LTN**	h	**PHOTO**		**3**								
	L.COVER/USE:	Veld grass and bush													

East of site (Family Stella)

0-20 cm red sandy (fine grade), with single grain structure topsoil

20-60 cm red, sandy (fine grade), structureless sub soil

Limited >120cm

Plooysburg 1000 (0-30cm)

OBS	17	**COMMENT**													
LAT	27 45 49.8	**SLOPE GRAD**		1		**MOISTURE**		L							
LONG	23 06 53.7	**SLOPE SHAPE**		R		**EROSION**		L							
	FORM	Py	**TSD**	30	**WET**	0	**HOR**	**TYPE**	**DEPTH**	**COL**	**CLAY**	**S-GR**	**CONS**	**STRUC**	**STONE**
	FAM	1000	**ESD**	30	**C**	I	**1**	**A**	20	2.5YR4/6	6	Vf	5	sg	0
	ROUGH	1	**ASD**	0	**GEO**	L2	**2**	**B**	30	2.5YR4/6	6	Vf	5	a	0
	TERR_POS	4	**LTN**	h	**PHOTO**		**3**								
	L.COVER/USE:	Veld grass and bush													

About 88% consists of the Plooysburg form (Family Brakkies)

0-30 cm reddish brown, sandy (fine grade), with single grain structure top soil

Limited hardpan carbonate horizon l

Not accommodated in Mispah soil form on behalf of the red apedal surface horizon

Plooysburg 1000 (40-120 cm)

OBS	25	**COMMENT**												
LAT	27 45 27.1	**SLOPE GRAD**		1		**MOISTURE**		L						
LONG	23 07 22.5	**SLOPE SHAPE**	R			**EROSION**		L						
	FORM	Py	**TSD**	100	**WET**	0	**HOR**	**TYPE**	**DEPTH**	**COL**	**CLAY**	**S-GR**	**CONS**	**STRUC**	**STONE**
	FAM	1000	**ESD**	100	**C**	I	**1**	**A**	20	2.5YR4/6	6	Vf	5	sg	0
	ROUGH	1	**ASD**	0	**GEO**	L2	**2**	**B**	100	2.5YR4/6	6	Vf	5	a	0
	TERR_POS	4	**LTN**	h	**PHOTO**		**3**								
	L.COVER/USE:	Veld grass and bush													

About 12% consists of the Plooysburg form (Family Brakkies)

0-20 cm reddish brown, sandy (fine grade), with single grain structure topsoil

20-60 cm yellowish red, sandy (fine grade), structureless sub soil

Limited hardpan carbonate horizon

The soils were then grouped in uniform utilization polygons. The criterion used to differentiate between utilization units, was the effective depth. The observation points with soils that had an effective depth less than 30cm, mostly without a sub soil or with carbonate outcrops. The deeper soils, ranging from 50cm to 120 cm, were grouped in one class. With the low rainfall, and sandy structure, differentiation was not necessary in this class. The soils were homogeneous in all the other classification criteria. The two utilization groups are illustrated in Figure 6.

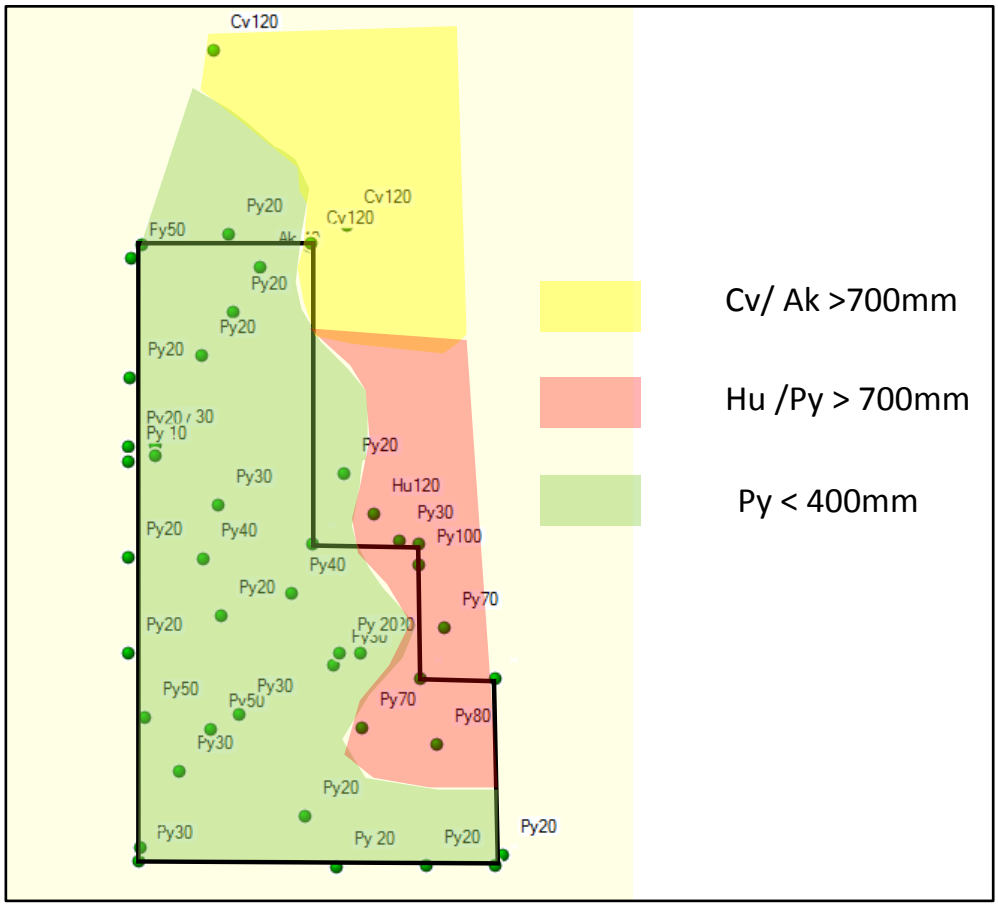

***Figure 6*: Soil Groups**

7.4. Veld Condition Assessment

A veld condition assessment was done simultaneous with the soil survey, by visual acknowledgement. Findings are shown in Figure 7 and Table 2.

Basal cover shallow soil

Basal cover deeper soil

***Figure 7*: Veld Conditions**

Table 2: Veld Condition

Shallow soil

Veld condition	**Rating**
Plant cover	Cover is sparse with some bare areas
Types of grasses most common	Moderate and poor grazing grasses
Soil surface condition	Moderate levels of topsoil loss
Bush encroachment level	Heavy to medium infestation
Soil type	Sandy soil
Deep soil	
Veld condition deep soil	**Rating**
Plant cover	Cover is moderate with some bare areas
Types of grasses most common	Moderate and poor grazing grasses
Soil surface condition	Slight levels of topsoil loss
Bush encroachment level	Only light bush encroachment present
Soil type	Sandy soil

7.5. Assessment of Access roads and connecting line

Layouts of alternative access roads and the connecting line are shown in Figure 8. Figure 9 shows photos from the various observation points.

7.5.1. Access Road

This is an existing road in daily use, tarred from N14 up to **a** where diverting towards Reitzhof A.H. The rest of the stretch is a dirt road for access by local owners to Kathu .The agricultural potential of soil on which the road is constructed is low and influence on drainage very low. With proper maintenance, the road could be an asset for the landowners.

The stretch from **c** to the proposed site follow the existing access road to the farm and camps. The soil is deep (Clovelly >120cm) but the texture and structure, combined with the climate, force it to be of low potential for agriculture.

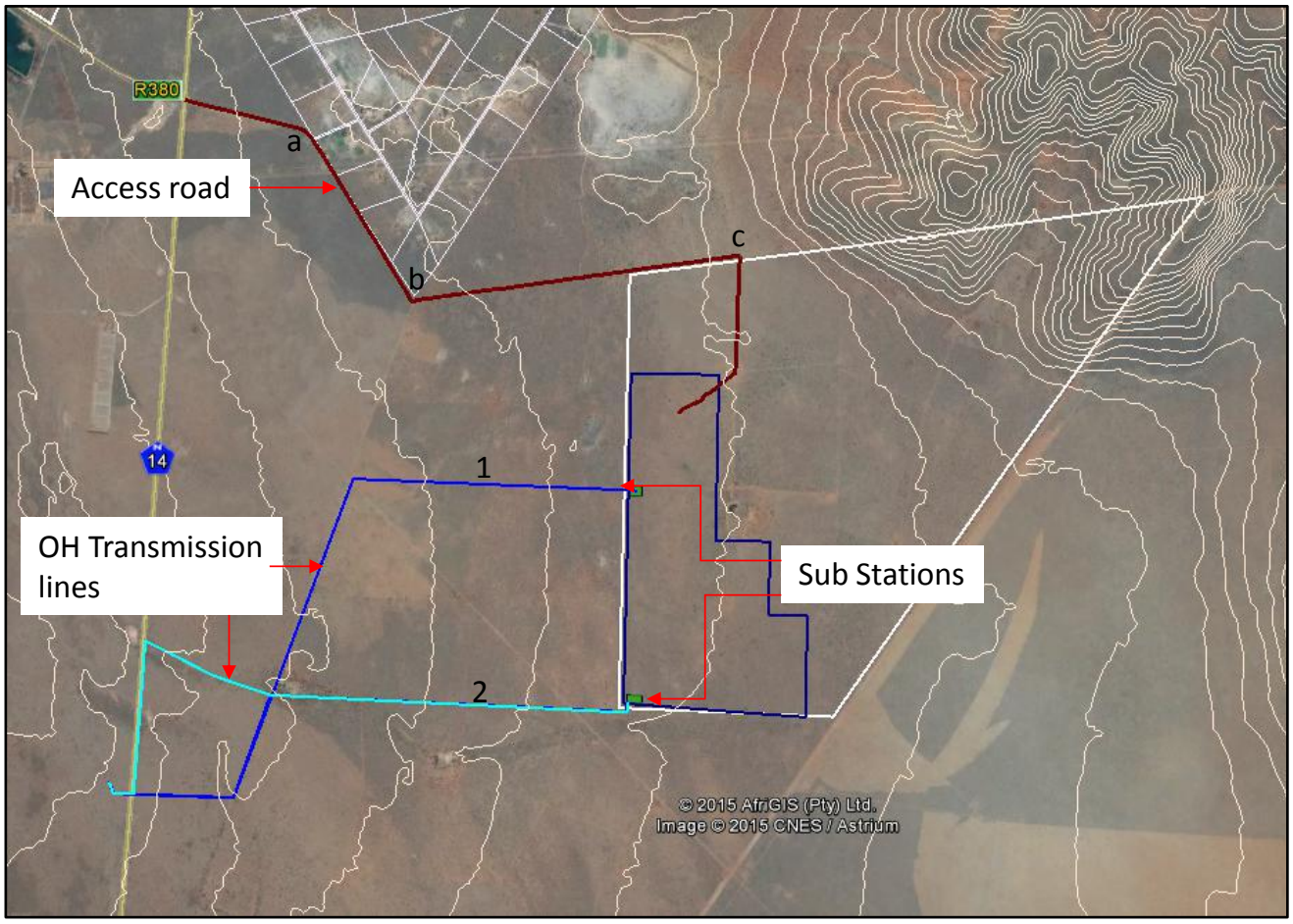

Figure 8: Access roads and overhead transmission lines

7.5.2. O.H Transmission line (1)

The top horizontal stretch from the proposed substation follow the internal fence alignment. This will have a low impact on management and is on low potential soil. The bottom horizontal stretch will have an impact on the camp composition, as it does not follow existing fencing. It is also on low potential soil.

The vertical stretch of the line is on the existing road alignment and on low potential agricultural soil.

7.5.3. O.H Transmission line (2)

This line follows an existing road alignment on low potential soils. From the control house, a new line will follow the boundary fence. This is on low potential soil and will have no impact on the drainage pattern. This alignment has the least interference with farming activities.

Access road

Access road

O.H. Transmission 1

O.H. Transmission 1

O.H. Transmission 2

O.H. Transmission 2

***Figure 9*: Photos of observation points**

7.6. Land Capability and Suitability for Agriculture

The site is largely unsuitable for cultivation due to the following limiting factors:

- Low annual rainfall, high evaporation and extreme temperatures restrict dry land cultivation.
- The very shallow soil depth with its limited water holding capacity restricts root development.
- The very fine sand grade of top soil influences the stability and increases Erodibility potential.
- Low clay percentage results in low water holding capacity and low nutrient availability, resulting in low soil fertility.

Table 3 and Table 4 contain further details of land capability.

Table 3: Land Capability and Suitability Assessment for Crop Production

Land capability class	Suitability Rating	Major Limitation to Crop Production	Area (ha)	% of Local Study Area
Class VI Py <30cm	Very low	Low water holding capacity Shallow rooting zone Severe climate Severe erosion hazard	278	88
Class lV Py >40cm	Low	Low water holding capacity Severe climate	38	12

Table 4: Land Capability and Suitability Assessment for Grazing

Area Description	Suitability Rating	Major Limitation to Grazing	Area (ha)	% of Local Study Area
Cattle	Low	Very shallow rooting depth low clay content, low rainfall, with a carrying capacity of 16-25ha /LSU	316	100

7.7. Water Availability/Provision

Water is provided to livestock from a boreholes pumped in reservoirs and troughs.

7.8. Erosion potential

The water erosion potential for this land is low. The predicted soil loss and sediment delivery is low; because of the low effect the rainfall has (erosivity class: 201–300mm) in combination with the level slope (0.5%).

However, the soil has a high susceptibility for wind erosion, due to the pure sand dominant to the area. If badly eroded, regeneration of the soil is very low, due to the shallow topsoil on hard setting carbonate.

7.9. Cumulative Effects

Cumulative effect assessment is the process of systematically analysing and assessing cumulative environmental change.

Figure 10 shows the renewable energy facilities surrounding the current site, which may have a cumulative effect on the region.

The following aspects will be investigated during the impact assessment:

- History of activities in the geographic area.
- Studies done which identified important effects.
- Test for involvement of the following:

- Contamination of ground water supplies
- Changes in hydrological regimes
- Decreases in quantity and quality of soils
- Loss of natural habitat or historic character through industrial development
- Loss of biological diversity

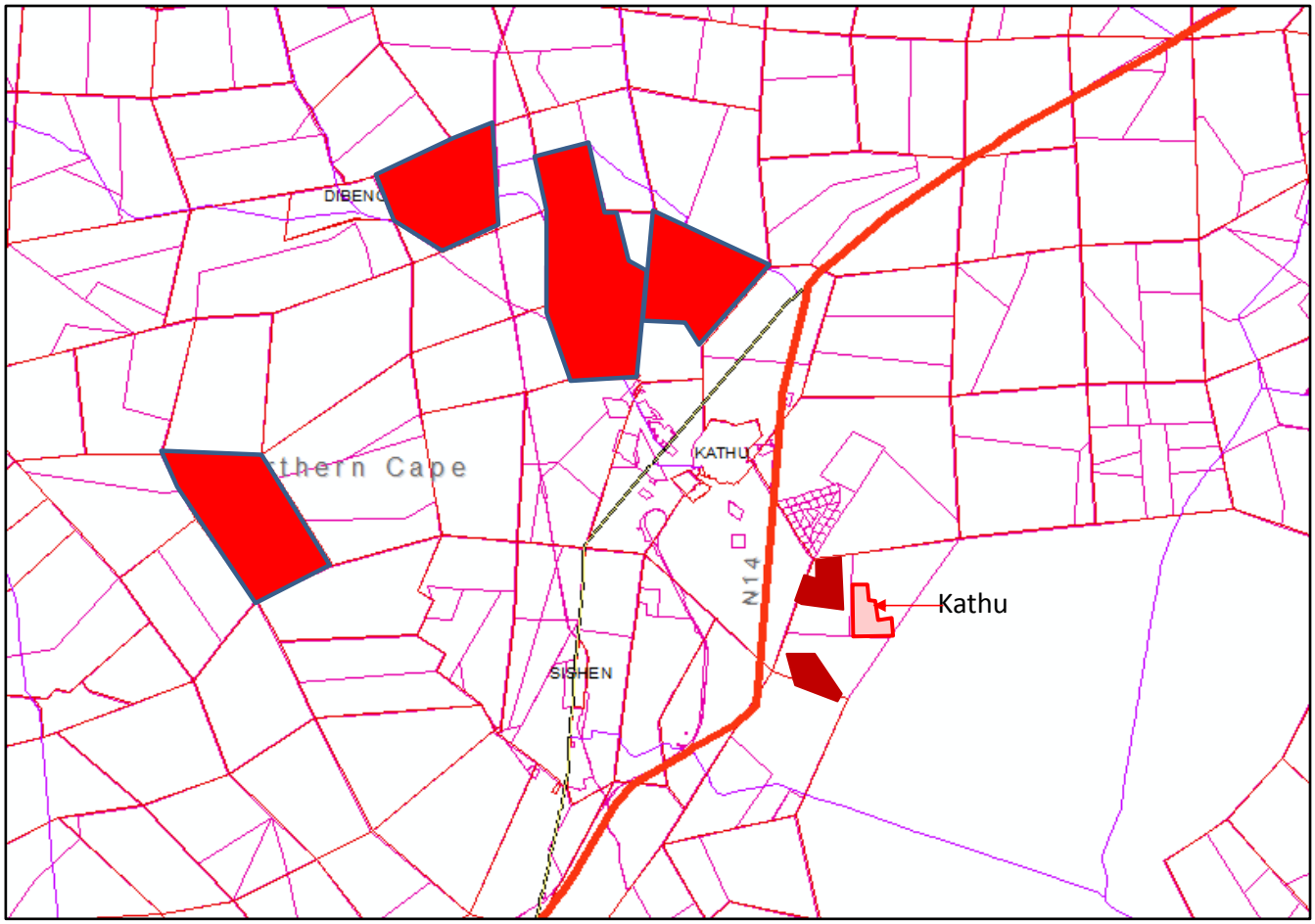

Figure 10: Renewable Energy Farms in the area of the site studied

8. SUMMARY OF FINDINGS

More than 88% of the soil has an effective depth of less than 30 cm and is dominated by carbonate outcrops. Cultivation is prevented by the lack of soil.

Soil characteristics are:

- Texture of the top and subsoil : sandy
- Sand grade : very fine
- Colour : red
- Water holding capacity: <20mm/m

- Carbon content: low
- Consistency : Loose to very loose

Climate of the area

- Semi-arid
- Annual rain 201 to 400mm
- Evaporation 2200 to 2400mm

The climate and soil property combination makes the site largely unsuitable for cultivation. The area is utilised as grazing,

9. POSSIBLE IMPACTS

The following possible impacts will received further attention during the impact assessment.

- Loss of agricultural land due to direct occupation by solar panels and other infrastructure.
- Alteration of drainage lines due to the construction of foundations and roads.
- Placement of spoil material generated from construction related excavations.
- Access roads dividing grazing camps in unusable sizes
- Cumulative impacts

10. CONCLUSION AND RECOMMENDATION

The climate and soil property combination makes the site largely unsuitable for cultivation. The area is used for grazing.

Impacts are at this stage regarded as low, but assessment will provide conclusions.

Christo Lubbe

C R LUBBE **12 January 2016**
AGRICULTURAL SPECIALIST

LIMITATIONS

This Document has been provided subject to the following limitations:

(i) This Document has been prepared for the particular purpose outlined in the proposal and no responsibility is accepted for the use of this Document in other contexts or for any other purpose.

(ii) CR Lubbe did not perform a complete assessment of all possible conditions or circumstances that may exist at the site referenced in the Document.

(iii) Conditions may exist which were undetectable given the limited nature of the enquiry CR Lubbe was retained to undertake with respect to the site. Variations in conditions may occur between investigatory locations, and there may be special conditions pertaining to the site which have not been revealed by the investigation and which have not therefore been taken into account in the Document. Accordingly, additional studies and actions may be required.

(iv) It is recognised that the passage of time affects the information and assessment provided in this document. CR Lubbe's opinions are based upon information that existed at the time of the production of the Document. CR Lubbe's opinion rests on the actual conditions of the site at the time the site was visited and cannot be used to assess the effect of any subsequent changes in the quality of the site.

(v) Any assessments made in this Document are based on the conditions indicated from published sources and the investigation described. No warranty is included, express or implied, that the actual conditions will conform exactly to the assessments contained in this Document.

(vi) Where data supplied by the client or other external sources, including previous site investigation data, have been used, it has been assumed that the information is correct unless otherwise stated. No responsibility is accepted for incomplete or inaccurate data supplied by others.

(viii) This Document is provided for sole use by the Client and is confidential to it and its professional advisers. No responsibility whatsoever for the contents of this Document will be accepted to any person other than the Client. Any use which a third party makes of this Document, or any reliance on or decisions to be made based on it, is the responsibility of such third parties. CR Lubbe accepts no responsibility for damages, if any, suffered by any third party because of decisions made or actions based on this Document.

REFERENCES

AGIS, 2007. Agricultural Geo-Referenced Information System, accessed from www.agis.agric.za on 10 November 2015.

Soil Classification Working Group, 1991. *Soil Classification: A Taxonomic System for South Africa.* Department of Agricultural Development, Pretoria.

Thomas V, Moll E and Grant R, 2008. *Sappi Tree Spotting: Cape –From Coast to Kalahari.* Jacana, Johannesburg

Van Oudtshoorn F.1994. *Gids tot Grasse van Suid-Afrika*. Briza, Arcadia.

Appendix A

Abbreviated Curriculum Vitae of Specialist

KEY QUALIFICATIONS:

National Higher Diploma in Agriculture (Irrigation), Technikon Pretoria, 1982
Certificate in Stereoscopic Interpretation, Geology and Resource Classification and Utilisation, Department of Agriculture, 1979
National Diploma in Agriculture, Technikon Pretoria, 1976

OTHER EDUCATION:

Certificate in Turf Grass Management, Technikon Pretoria, 1987
Certificate in Landscape Management, Technikon Pretoria, 1988
Cultivated pastures (Mod 320), University of Pretoria, 1995
FSC Auditors Course (Woodmark, UK), Sappi Ltd, 2003
NOSA Health and Safety Certificate, 1996
Certificate of Competence: Civil Designer - Design Centre and Survey and Design (Knowledge Base, August 2005)

EMPLOYMENT RECORD:

July 2006 to date	**CR LUBBE** Self employed Involved in various projects (see Summary of Experience below)	
June 2004- June 2006	**Gauteng Department of Agriculture Conservation and Environment** (Component: Technology Development and Support) **Acting Assistant Director: Resource Planning and Utilization**	**Johannesburg, SA**
Jan 1997 – May 2004	**CR LUBBE** **Self employed** Involved in various projects (se Summary of Experience below)	**Pretoria, SA**
1980 to 1996	**Technikon Pretoria** **Lecturer** Teaching Agricultural Engineering and Land Use Planning subjects. Teaching included practical courses, examination and moderation	**Pretoria, SA**
1974 - 1979	**Department of Agriculture (Transvaal Region)** **Senior Extension Technician** Farm Planning, Surveying, Design of soil conservation systems, Agricultural Extension.	**Carolina and Ermelo, SA**

SUMMARY OF EXPERIENCE

Has 42 years of experience in planning and managing natural resources to ensure optimal utilisation, without exploiting such resources to the detriment of future generations.

Fourteen years experience as a soil consultant, doing mainly soil surveys, terrain classification and agricultural potential studies. Reports include a variety of maps and GIS aspects thus play a large role in these surveys and studies.

Seventeen years of lecturing agricultural engineering subjects: Soil Conservation Techniques I, II and III, which dealt with the surveying, design and drawing of soil conservation structures; Farm Planning, which dealt with optimal resource utilization and Agricultural Mechanization, which dealt with the implements and machinery used to mechanize farming.

Ten years experience in the survey, design and supervising the construction of soil conservation structures in the agricultural field, mainly for farm planning.

Appendix B

Declaration of Independence

CR Lubbe was appointed by AEP Kathu Solar (Pty) Ltd via Cape Environmental Assessment Practitioners (Pty) Ltd, the EAP, to conduct an independent agricultural scoping study for the proposed PV Power Plant in the Northern Cape.

He is not a subsidiary or in any way affiliated to AEP Kathu Solar (Pty) Ltd.

CR Lubbe also does not have any interest in secondary developments that may arise from the authorisation of the proposed project.

Christo Lubbe

CR Lubbe

12 January 2016