

## **Appendix C2**

- Background Information Document (BID) and Site Notices
  - Proof of Placement of Site Notices



# BACKGROUND INFORMATION DOCUMENT

FOR THE PROPOSED

SAN KRAAL WIND ENERGY FACILITY AND ASSOCIATED  
INFRASTRUCTURE, NORTHERN AND EASTERN CAPE PROVINCES

## ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

MAY 2016



## INTRODUCTION AND BACKGROUND

InnoWind (Pty) Ltd is proposing the development of the San Kraal Wind Energy Facility (WEF), on a site located near the town of Noupoort in the Northern Cape Province, within the Umsobomvu Local Municipality and a small portion of the site transcending into the Eastern Cape Province in the Inxuba Yethemba Local Municipality. San Kraal Wind Power (Pty) Ltd is a Special Purpose Vehicle (SPV) established under InnoWind for the development of the Proposed San Kraal WEF and associated infrastructure.

InnoWind has appointed Arcus Consultancy Services Ltd (Arcus) as the Environmental Assessment Practitioner that will undertake the environmental authorisation process for the proposed development.

*InnoWind (Pty) Ltd is a South African based integrated renewable energy company that develops, finances, builds, owns and operates commercial wind-powered generation facilities to supply energy into the national power grid. InnoWind is a subsidiary of the French company EDF Energies Nouvelles, a market leader in green electricity production. EDF EN currently owns and operate 5525 MW of installed wind energy capacity worldwide (<http://www.edfenergies-nouvelles.com>).*

An application for Environmental Authorisation (EA) will be submitted to the National Department of Environmental Affairs (DEA) under the provisions of the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA), as amended, and the requirements of the relevant Environmental Impact Assessment (EIA) Regulations.

Once granted environmental authorisation, the project aims to participate in the Renewable Energy Independent Power Producer Procurement Programme (REIPPP), introduced by the Department of Energy (DoE) in 2011, to select the most competitive renewable projects proposed by different IPP's in a competitive bidding process. In accordance with the REIPPP bid requirements, InnoWind has established San Kraal Wind Power (Pty) Ltd as the SPV to obtain the Environmental Authorisation.

If the project is selected as a preferred bidder, InnoWind will enter into an implementation agreement with the DoE and a Power Purchase Agreement (PPA) with Eskom. Once operational the electricity would be sold to Eskom under the PPA at the agreed bid price. Eskom then distributes the energy through the National Grid to the energy users.

## PURPOSE OF THIS DOCUMENT

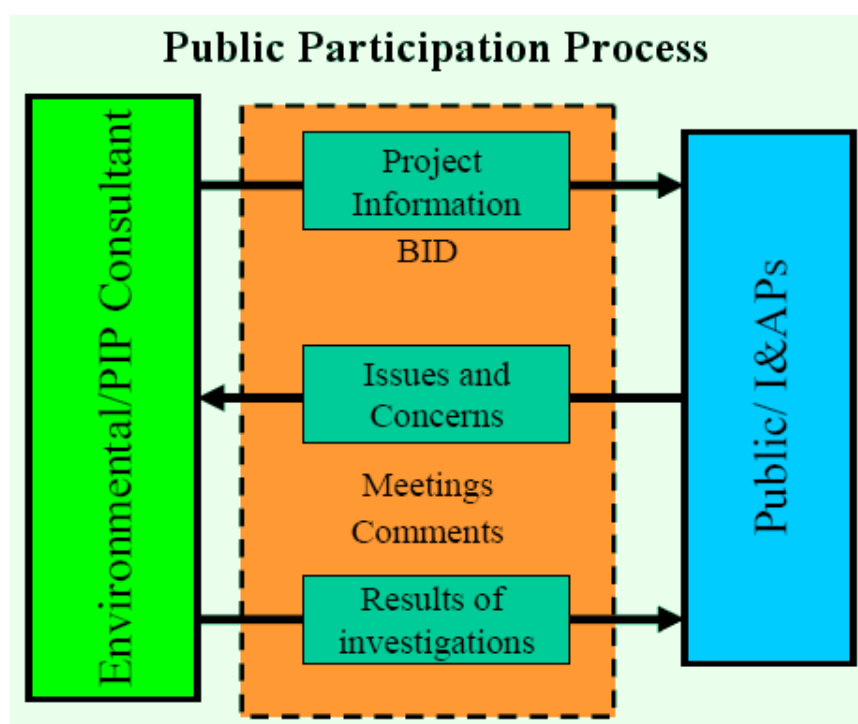
This Background Information Document (BID) serves to inform all Interested and Affected Parties (I&APs) of the proposed development.

Public Participation is an important part of the environmental authorisation process. It offers I&APs the opportunity to obtain information, comment, raise issues of concern and collaborate in the authorization process. This BID aims to provide the reader with basic information regarding the proposed project including:

- An introduction of the project, including location details;
- An overview of the proposed activities and the legal framework in which the project is executed;

- An overview of the potential environmental impacts and alternatives that may potentially occur;
- An explanation of the Public Participation Process (PPP) to be followed; and
- An explanation of how to get involved as an I&AP.

Information sharing forms an important component of the public participation process and provides interested and affected parties with the opportunity to be involved with the project from the outset. Comments, suggestions and inputs from the public, along with specialists assessments of the various environmental impacts of the project will assist the Department of Environmental Affairs (DEA) in their decision making process.



## PROJECT DESCRIPTION

InnoWind (Pty) Ltd proposes to develop a 140 MW Wind Energy Facility (WEF) located approximately 4 km south of the town of Noupoort in the Northern Cape, bordering the Eastern Cape.

The exact location of each turbine and the routing of the powerlines will be determined during the EIA process and confirmed in the EIA phase, aided through the investigations of environmental, technical and financial constraints.

**Figure 1** shows the preliminary layout of the WEF.

**Table 1** below provides an indication of the development details of the WEF.

**Table 1 Project Information**

Aspect	Description
Site Name	San Kraal Wind Energy Facility
Special Purpose Vehicle (SPV)	San Kraal Wind Power (Pty) Ltd
Number of turbines	Up to 75
Capacity	140 MW
Hub height	Up to 150 m
Blade length	Up to 70 m
Rotor diameter	Up to 140 m
Area occupied by transformer /switching station/substations	5,000 m <sup>2</sup>
Capacity of onsite substation	2 x 80 MVA
Area occupied by permanent laydown areas	Approximately 10,000 m <sup>2</sup> per turbine
Width of internal roads during construction	6 - 12 m (12m width is required for curves in order to allow trucks to turn)
Total size of WEF site	115,000,000 m <sup>2</sup>
Number of met masts	5
Transmission lines: Distance, kV, single or double string	25 km, up to 400 kV single or double string to the Umsobomvu Substation
Operations and maintenance buildings (O&M building) with parking area	Approximately 5 625 m <sup>2</sup>
Predicted life span of the WEF	20 - 40 years
Borrow Pits	It is likely that borrow pits will be required during the construction of the WEF. The need for this will be assessed during the EIA process and the relevant permits through the Department of Mineral Resources will be obtained.
Batching Plants	It is likely that a batching plant will be constructed on site during the construction phase of the WEF due to the potential volumes of concrete that is required, the need for this will be assessed during the EIA process.
Fuel Storage	It is likely that fuel will be required to be stored on site during the construction and operation of the WEF. The need and volumes of the storage will be assessed during the EIA process.

## THE EIA PROCESS

An EIA process is a planning and decision making tool, to describe and assess the physical, biological, social, and economic impacts which a given development may have. To be able to inform the decision-making process, it is important for public issues and concerns to be identified timeously, to enable the EIA team to evaluate them.

The EIA process allows for the environmental consequences of a proposed development to be identified up-front, investigated through the impact assessment process, and taken into consideration by the decision-making authorities. The Environmental Assessment Practitioner (EAP) and various specialists also identify potential negative and positive impacts that could arise as a result of the proposed development and identify applicable mitigation measures required, to avoid or reduce negative impacts and to enhance positive impacts.

### LEGAL REQUIREMENTS

On 4 December 2014, the Minister of Environmental Affairs promulgated new regulations in terms of Chapter 5 of the NEMA, viz, the EIA Regulations 2014 (Government Notices (GN) No. R. 982, R. 983, R. 984 and R. 985 in Government Gazette No. 38282 of 4 December 2014). These regulations came into effect on 8 December 2014.

The EIA Regulations 2014 published in Government Notice (GN) No. R982, provide for the control of certain Listed Activities. These activities are listed in GN No. R983 (Listing Notice (LN) 1 – Basic Assessment), R984 (Listing Notice 2 – Scoping & EIA Process) and R985 (Listing Notice 3 – Basic Assessment) of 4 December, and are prohibited until environmental authorisation has been obtained from the competent authority, in this case, the Department of Environmental Affairs (DEA).

The Listed Activities applicable to this proposed project are presented in **Table 2** below. All potential impacts associated with these Listed Activities will be considered and assessed in this EIA.

As this proposal triggers Listed Activities in Listing Notices 1 – 3, a full Scoping and EIA process is to be followed for this application.

Depending on the final design of the WEF there may be a requirement for the following additional permits/ authorisations:

- Waste Management License/s as required by the NEMA;
- Mining Permits as required by the Minerals and Petroleum Resources Development Act, 2002 (MPRDA) (Act No. 28 of 2002)(MPRDA); and
- Water Use Licenses as required by the National Water Act, 1998 (Act No. 36 of 1998) (NWA).

**Table 2: Applicable Listed Activities in terms of the NEMA**

Government Notice Listing Number	Description of Listed Activities
GN R.983 12 (iii) (x) and (xi)	The construction of- (iii) bridges exceeding 100 square meters in size; (x) buildings exceeding 100 square meters in size; (xii) infrastructure or structures with a physical footprint of 100 square meters or more; where such development occurs – (a) within a watercourse; or (c) if no developments setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.
GN R.983 19	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from - (i) a watercourse
GN R983 28 (ii)	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture or afforestation on or after 01 April 1998 and where such development (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare.
GN R.983 30	Any process or activity identified in terms of section 53(1) of the National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004).
GN R.983 48 (iii)	The expansion of (iii) bridges where the bridge is expanded by 100 square meters or more in size; where such development occurs – (a) within a watercourse; (b) in front of a development setback; or (c) if no developments setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.
GN R.983 56 (i) and (ii)	The widening of a road by more than 6 m, or the lengthening of a road by more than 1 kilometre – (i) where the existing reserve is wider than 13,5 metres; or (ii) where no reserve exists, where the existing road is wider than 8 metres.
GN R.984 1	The development of facilities or infrastructure for the generation of electricity from a renewable resource where the electricity output is 20 megawatts or more.

Government Notice Listing Number	Description of Listed Activities
GN R.984 15	The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance plan.
GN R.985 4	The development of a road wider than 4 metres with a reserve less than 13.5 metres. (a) in Northern Cape: (ii) areas outside urban areas; (aa) a protected area identified in terms of NEMPAA, excluding disturbed areas; (bb) National Protected Area Expansion Strategy Focus; (ee) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans. (b) In Eastern Cape (ii) outside urban areas; (aa) a protected area identified in terms of NEMPAA, excluding disturbed areas; (bb) National Protected Area Expansion Strategy Focus; (ee) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.
GN R.985 14	The development of (iii) bridges exceeding 10 square meters in size; (x) buildings exceeding 10 square metres in size and (xi) infrastructure or structures with a physical footprint of 10 square metres or more; Where such development occurs – (a) within a watercourse and (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse. (a) In Northern Cape: (c) In Eastern Cape (ii) outside urban areas, in: (aa) a protected area identified in terms of NEMPAA, excluding disturbed areas; (bb) National Protected Area Expansion Strategy Focus; (ee) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.
GN R.984 18 (a)	The widening of a road by more than 4 metres; or the lengthening of a road by more than 1 kilometre (a) In Northern Cape: (ii) All areas outside urban areas: (aa) a protected area identified in terms of NEMPAA, excluding disturbed areas; (bb) National Protected Area Expansion Strategy Focus; (ee) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.



## PRELIMINARY IDENTIFICATION OF IMPACTS

The EIA process will consider the potential impact of the development through its construction and operation. These impacts will be assessed by the EAP and a team of appointed specialists. To date the need for specialist's studies has been identified and the specialists appointed as described below. Further potential impacts may be identified during the scoping stage and added to this list.

**Table 3 Specialist Assessments**

Impact Type	Appointed Specialist	Impact Assessment
<b>Bird Impact Assessment and Monitoring</b>	Chris van Rooyen Consulting: Mr. Chris van Rooyen	<p>The key potential impact types on avifauna from WEFs and associated infrastructure are:</p> <ul style="list-style-type: none"> <li>•Collision with turbines;</li> <li>•Electrocution;</li> <li>•Collision with power lines;</li> <li>•Disturbance and displacement;</li> <li>•Disruption of bird movements; and</li> <li>•Habitat destruction.</li> </ul> <p>The impact assessment study will include the 12 months of monitoring on site according to the Birds and Wind Energy Best Practice Guidelines</p>
<b>Bats Impact Assessment and Monitoring</b>	Animalia: Mr. Werner Marais	<p>WEFs have the potential to impact bats directly through collisions and barotrauma resulting in mortality and indirectly through the modification of habitats. The impact assessment study will include 12 months of monitoring on site, according the South African Good Practice Guidelines for Surveying Bats in Wind Energy Facility Developments – Pre-Construction</p>
<b>Terrestrial Ecological Impact Assessment (Flora and Fauna)</b>	Simon Todd Consulting: Mr. Simon Todd	<p>Any form of development has the potential to impact flora and fauna, this includes removal of important habitats of flora and fauna. The specialist impact assessment study will determine the extent, if any, of the proposed development on flora and fauna.</p>
<b>Heritage Impact Assessment</b>	ACO Associates: Dr. Tim Hart	<p>Any form of development has the potential to impact on important and unknown heritage, archaeological and paleontological features. The specialist impact assessment study will determine the extent, if any, of the proposed development on these features</p>
<b>Paleontology Assessment</b>	Dr. John Almond (via ACO Associates)	
<b>Aquatic/Wetland Assessment</b>	Scherman Colloty and Associates: Dr. Brian Colloty	<p>Potential impacts on water courses and wetland by the proposed development will be assessed by this study. If required a water use license will be submitted for the proposed development.</p>

<b>Noise Impact Assessment</b>	Enviro-Acoustics Research: Mr. Morne de Jager	The potential effect of noise from the wind turbines and Potential intrusion caused by heavy construction vehicles and cranes, stockpiling of materials, construction camps, and excavations from borrow pits, including dust and noise will be assessed in the noise impact assessment study.
<b>Visual and Landscape Assessment</b>	Bernard Oberholzer Landscape Architects and Meirelles Lawson Burger Architects: Mr. Bernard Oberholzer and Mr Quinton Lawson	WEFs have the potential for visual intrusion on the skyline and on scenic resources due to the number and height of wind turbines. The visual impact assessment study will be will be conducted to determine the visibility of the proposed development as well as identification of important viewpoints and view corridors, and a photographic survey from selected viewpoints, taking into account possible sensitive receptors.
<b>Soils and Agriculture</b>	Agricultural Research Council: Mr Gary Patterson	Potential impacts on soils by the proposed development, as well as the agricultural potential of the site will be determined during this study.
<b>Social Impact Assessment</b>	Tony Barbour Environmental Consultant and Researcher: Mr. Tony Barbour	The potential socio-economic impacts of the proposed development on the surrounding community will be assessed by the specialist.

The key steps involved in a typical EIA process are depicted in Figure 2 and described below:

**Initial Notification and Call to Register as I&AP's:** Advertisements, site notices, posters, letters to landowners and pre-identified I&APs serve to invite members of the public to register on the project's I&AP database. The aim of this step is to inform the public of the proposed development and to encourage initial comment and feedback.

**Scoping Phase:** This includes collation of initial comments, concerns, objections and specialist investigations, into a concise report (Scoping Report) which provides feedback on the following:

- Nature of the activity;
  - Description of the receiving environment;
  - Description of specialist studies to be conducted;
  - Identification of potential feasible alternatives; identification of potential positive and negative impacts; and
  - Identification of knowledge gaps.
- **EIA Phase:** The primary aim of this phase is to investigate and comparatively assess the impact on the environment of the various identified alternatives and make a recommendation of the most preferred alternative for consideration by DEA. In addition, the identified impacts are assessed and relevant management and mitigation measures listed for inclusion in an Environmental Management Programme (EMPr). The EIA culminates in the compilation of an EIA Report which is sent to DEA for decision making.

**Ongoing Public Consultation:** Throughout the process, the public and specifically the registered I&APs will be consulted and involved. This involvement may be through

dissemination of information by means of public meetings and focus group meetings, draft reports (Scoping & EIA), and project updates. I&APs are encouraged to participate as far as possible.

Once the EIA Phase has been completed and the Final Environmental Impact Assessment Report has been submitted to the competent authority (DEA), the DEA will review the application and make an informed decision. I&APs will be informed of the decision and their right to appeal in the event that they disagree with the decision.

## HOW TO GET INVOLVED

I&APs are invited to be a part of the public participation from the beginning of the project. Comments, objections and advices raised by I&APs will help focus the EIA process and enhance the quality of the information provided to the authorities for decision making.

As an I&AP you need to **ensure that you are registered** for the project and that you forward your comments to Arcus within the stipulated timeframes at the details provided in this document.

### ***You can become involved by:***

In order to ensure your involvement in this EIA process, please register with Arcus by submitting your contact information (name, contact details, interest in the project) to:

Arcus Renewable Energy Consulting Ltd

Office 220 Cube Workspace

Cnr Long Street and Hans Strijdom Road, Cape Town, 8001

Telephone: +27 21 412 1529

Fax: +27 86 762 2885

Email: [sankraal@arcusconsulting.co.za](mailto:sankraal@arcusconsulting.co.za)

Arcus Reference: 2244 San Kraal



Registering yourself by e-mail, fax, letter or phone as an I&AP;

Submitting the Registration Form/ Questionnaire and mailing or faxing it to the contact person provided;

Attending the open days/ public meetings (as applicable). As a registered I&AP you will automatically be invited to these events;

Reviewing and commenting on the draft Scoping and EIA Reports within the allowed review periods; and

Contacting the contact persons below with your comments, queries, suggestions, or request for further project information.

# AGTERGRONDINLICHTINGSDOKUMENT

VIR DIE VOORGESTELDE

SAN KRAAL-WINDKRAGFASILITEIT EN GEPAARDGAANDE

INFRASTRUKTUUR IN DIE NOORD- EN OOS-KAAP

## OMGEWINGSIMPAK-ASSESSERINGSPROSES

MEI 2016



## INLEIDING EN AGTERGROND

InnoWind (Edms.) Bpk. stel die konstruksie van die San Kraal-windkragfasiliteit (WEF) voor op 'n stuk grond naby die dorp Noupoort in die Noord-Kaap. Die terrein is binne die Umsobomvu Plaaslike Munisipaliteit geleë, met 'n klein gedeelte daarvan wat oor die grens van die naasliggende Oos-Kaap en binne die Inxuba Yethemba Plaaslike Munisipaliteit strek. San Kraal Wind Power (Edms.) Bpk. is 'n Spesiale Nutsentiteit (SPV) gestig onder InnoWind vir die ontwikkeling en konstruksie van die Voorgestelde San Kraal-WEF en die gepaardgaande infrastruktuur.

InnoWind het Arcus Consultancy Services Bpk. (Arcus) as die Omgewingsimpak-assesseringspraktisyn aangestel wat die omgewingsmagtigingsproses vir die voorgestelde ontwikkelingsprojek sal onderneem.

*InnoWind (Edms.) Bpk. is 'n Suid-Afrikaanse geïntegreerde hernubare-energiemaatskappy wat kommersiële windkrag-elektrisiteitsopwekkingsfasiliteite ontwerp, finansier, bou, besit en bedryf om elektrisiteit aan die nasionale kragnetwerk te lewer. InnoWind is 'n filiaal van die Franse maatskappy EDF Energies Nouvelles, 'n markleier in die produksie van groen krag. EDF EN besit en bedryf tans wêreldwyd 5525 MW geïnstalleerde windkragvermoë. (<http://www.edfenergies-nouvelles.com>).*

'n Aansoek vir Omgewingsmagtiging (EA) sal ingevolge die bepalings van die Wet op Nasionale Omgewingsbestuur, 1998 (Wet 107 van 1998) (NEMA), soos gewysig, asook die vereistes van die relevante regulasies vir Omgewingsimpak-assessering (EIA), aan die Nasionale Departement van Omgewingsake (DEA) voorgelê word.

Sodra omgewingsmagtiging verkry is, sal die projek gerig wees op deelname aan die Aankoopprogram van Hernubare Energie van Onafhanklike Kragprodusente (REIPPPP), wat in 2011 deur die Departement van Energie (DoE) ingestel is om die mededingendste projekte vir hernubare energie, soos voorgestel deur verskillende onafhanklike kragprodusente (IPP's), te kies. Ooreenkomstig die REIPPPP-bodvereistes, is PWP deur InnoWind gestig as die SPV om Omgewingsmagtiging te verkry.

Indien die projek as voorkeurbod gekies word, sal InnoWind 'n implementeringsooreenkoms met die DoE en 'n Kragaankoop-ooreenkoms (PPA) met Eskom sluit. Sodra die fasiliteit in bedryf is, sal elektrisiteit ingevolge die PPA teen 'n ooreengekome bodprys aan Eskom verkoop word. Eskom sal dan die elektrisiteit deur die Nasionale Kragnetwerk aan verbruikers versprei.

## DOEL VAN HIERDIE DOKUMENT

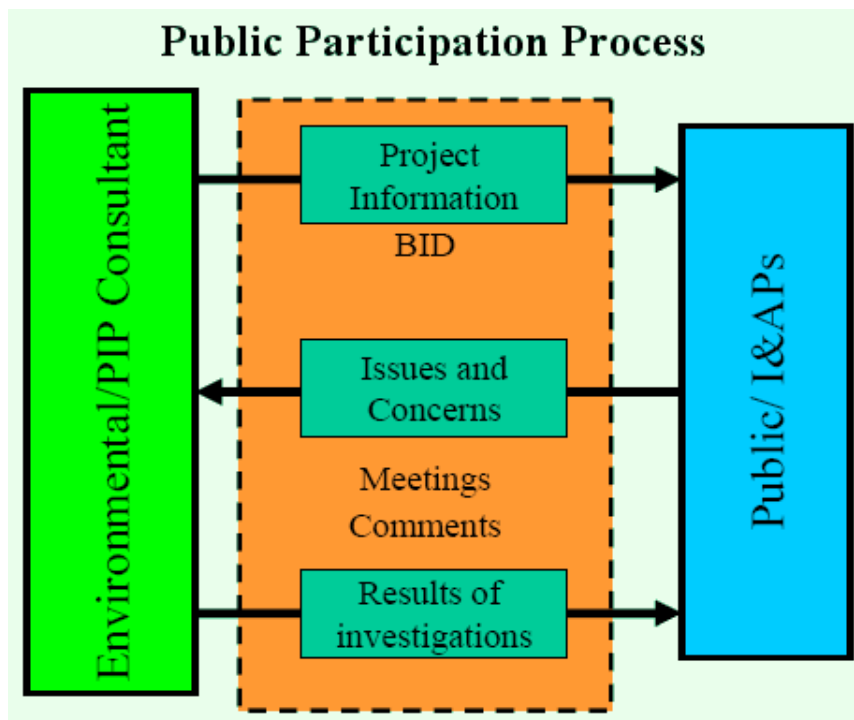
Hierdie Agtergrondinligtingsdokument (BID) het ten doel om alle Belanghebbende en Geaffekteerde Partye (I&AP's) oor die voorgestelde ontwikkeling in te lig.

Openbare Deelname is 'n belangrike aspek van die omgewingsmagtigingsproses. Dit bied aan I&AP's die geleentheid om inligting te kry, kommentaar te lewer, kommerwekkende kwessies te opper en 'n bydrae te lewer tot die magtigingsproses. Hierdie BID wil die leser van basiese inligting oor die voorgestelde projek voorsien, insluitende:

- 'n Inleiding tot die projek, waaronder besonderhede oor die ligging;

- 'n Oorsig van die voorgestelde bedrywighede en die regsraamwerk waarbinne die projek deurgevoer word;
- 'n Oorsig van die potensiele omgewingsimpak en alternatiewe wat moontlik kan opduik;
- 'n Verduideliking van die Openbare Deelname-proses (PPP) wat gevolg sal word; en
- 'n Verduideliking van hoe om as 'n I&AP betrokke te raak.

Die deel van inligting is 'n belangrike komponent van die Openbare Deelname-proses en gee aan belanghebbendes en geaffekteerde partye die geleentheid om uit die staanspoor by die projek betrokke te raak. Kommentaar, voorstelle en insette van die publiek, saam met assesserings deur spesialiste van die onderskeie omgewingsimpakte van die projek, sal die Departement van Omgewingsake (DEA) met hul besluitneming help.



## PROJEKBESKRYWING

InnoWind (Edms.) Bpk. stel die ontwikkeling van 'n Windkragfasiliteit (WEF) van 140 MW voor in 'n gebied sowat 8 km suid van die dorp Noupoort in die Noord-Kaap, aangrensend aan die Oos-Kaap.

Die presiese ligging van elke turbine, asook die roete van die kraglyne sal tydens die EIA-proses bepaal en in die EIA-fase bevestig word, met behulp van die ondersoekende omgewing-, tegniese en finansiële beperkings.

**Figuur 1** toon die voorlopige uitleg van die WEF.

**Tabel 1** hieronder gee 'n aanduiding van die ontwikkelingsbesonderhede van die WEF.

**Tabel 1: Projekbesonderhede**

Aspek	Beskrywing
Terreinnaam	San Kraal-windkragfasiliteit
Nutsentiteit vir Spesiale Doelwitbereiking (SPV)	San Kraal Wind Power (Edms.) Bpk.
Aantal turbines Vermoë	Tot 75 140 MW
Naafhoogte	Tot 150 m
Lem se lengte	Tot 70 m
Rotor se deursnee	Tot 140 m
Oppervlakte in beslag geneem deur transformator/omskakelingstasie/substasies	5,000 m <sup>2</sup>
Vermoë van substasie op terrein	2 x 80 MVA
Oppervlakte in beslag geneem deur permanente neerlêpersele	Ongeveer 10,000 m <sup>2</sup> per turbine
Breedte van interne paaie gedurende konstruksiefase	6-12 m (12 m breedte word vereis vir draaie sodat vragmotors kan draai)
Totale grootte van WEF-terrein	115,000,000 m <sup>2</sup>
Aantal maste	5
Transmissielyste: Afstand, kV, enkel of dubbel gespan	25 km, tot 400 kV enkel of dubbel gespan na die Umsobomvu-substasie
Bedryf- en instandhoudingsgeboue (O&M) met parkeerterrein	Ongeveer 5,625 m <sup>2</sup>
Voorspelde leeftyd van die WEF	20-40 jaar



Leengroewe	Leengroewe sal waarskynlik gedurende die konstruksie van die WEF vereis word. Die noodsaak hiervan sal gedurende die EIA-proses bepaal en die relevante permitte by die Departement van Minerale Hulpbronne verkry word.
Bondelingsaanlegte	'n Bondelingsaanleg sal waarskynlik gedurende die konstruksiefase van die WEF op die perseel gebou word vanweë die potensiële volumes konkreet wat nodig gaan wees. Die behoefte hieraan sal gedurende die EIA-proses bepaal word.
Brandstofberging	Brandstof sal waarskynlik gedurende die konstruksie en bedryf van die WEF op die perseel geberg moet word. Die behoefte hieraan en die volumes nodig sal gedurende die EIA-proses bepaal word.

## DIE EIA-PROSES

'n EIA-proses is 'n beplanning- en besluitnemingsinstrument om die fisieke, biologiese, maatskaplike en ekonomiese impak van 'n gegewe ontwikkeling te beskryf en te assesseer. Om die besluitnemingsproses te kan verbeter, is dit belangrik dat openbare kwessies en kommer vroegtydig geïdentifiseer word sodat die EIA-span dit kan evalueer.

Die EIA-proses maak dit moontlik dat die gevolge vir die omgewing van 'n voorgestelde ontwikkeling uit die staanspoor geïdentifiseer, deur die impak-assesseringsproses ondersoek en deur die besluitnemingsowerheid in ag geneem kan word. Die Omgewing-assesseringspraktisyn (EAP) en verskillende spesialiste identifiseer ook potensiële negatiewe en positiewe gevolge wat uit die voorgestelde ontwikkeling kan spruit. Hulle ondersoek dan toepaslike versagende maatreëls nodig om die negatiewe uitwerking te vermy of te verminder en die positiewe aspekte te versterk

## REGSVEREISTES

Op 4 Desember 2014 het die Minister van Omgewingsake ingevolge Hoofstuk 5 van NEMA nuwe regulasies gepromulgeer, te wete die EIA-regulasies 2014 (Staatskennisgewings (GN) Nr. R. 982, R. 983, R. 984, en R. 985 in Staatskoerant Nr. 38282 van 4 Desember 2014). Hierdie regulasies het op 8 Desember 2014 van krag geword.

Die EIA-regulasies 2014 gepubliseer in Staatskennisgewing (GN) Nr. R982, maak voorsiening vir die beheer van sekere Gelyste Bedrywighede. 'n Lys van hierdie bedrywighede word gegee in GN Nr. R983 (Lyskennisgewing (LN) 1 – Basiese Assesering), R984 (Lyskennisgewing 2 – Omvangsbepaling & EIA-proses) en R985 (Lyskennisgewing 3 – Basiese Assesering) van 4 Desember 2014, en is verbode totdat omgewingsmagtiging van die bevoegde owerheid verkry is. In hierdie geval is die bevoegde owerheid die Departement van Omgewingsake (DEA).

Die Gelyste Bedrywighede van toepassing op hierdie voorgestelde projek word in **Tabel 2** hieronder gegee. Enige potensiële impak wat met hierdie Gelyste Bedrywighede gepaard gaan, sal in hierdie EIA oorweeg en geassesseer word.

Omdat hierdie voorstel Gelyste Bedrywighede in Lyskennisgewings 1 – 3 tot gevolg sal hê, moet 'n volledige Omvangbepaling- en EIA-proses vir hierdie aansoek gevolg word.

Afhangende van die finale ontwerp van die WEF, kan die volgende bykomende permitte/magtigings ook vereis word:

- Afvalbestuurslisensie/s soos deur die NEMA vereis;
- Mynpermitte soos vereis deur die Wet op Minerale- en Petroleum-hulpbronontwikkeling, 2002 (MPRDA) (Wet Nr. 28 van 2002);
- Watergebruikslisensies soos vereis deur die Nasionale Waterwet, 1998 (Wet Nr. 36 van 1998) (NWA).

**Tabel 2: Gelyste aktiwiteite van toepassing ingevolge die NEMA**

Staatskennisgewing se lysnommer	Beskrywing van gelyste aktiwiteite
GN R.983 12 (iii) (x) en (xi)	Die konstruksie van – (iii) brûe groter as 100 vierkante meter; (x) geboue groter as 100 vierkante meter; (xii) infrastruktuur of strukture met 'n fisieke voetspoor van 100 vierkante meter of meer; waar sodanige ontwikkeling voorkom – (a) binne 'n rivierloop; of (c) indien geen ontwikkelingsbeperking bestaan nie, binne 32 meter van 'n rivierloop, gemeet vanaf die oewer/kant van die rivierloop.
GN R.983 19	Die opvulling van of storting van enige materiaal van meer as 5 kubieke meter in; of baggerwerk, uitgrawings, verwydering of verskuiwing van grond, sand, skulpe, skulpgruis, klein klippies of rots van meer as 5 kubieke meter van – (i) 'n rivierloop
GN R983 28 (ii)	Residensiële, gemengde, kleinhandel, kommersiële, nywerheid- of institusionele ontwikkelings waar sodanige grond gebruik was vir landbou of bosbou op of ná 1 April 1998 en waar sodanige ontwikkeling (ii) buite 'n stedelike gebied sal plaasvind, waar die totale grondgebied wat ontwikkel sal word groter as 1 hektaar is.
GN R.983 30	Enige proses of aktiwiteit geïdentifiseer ingevolge artikel 53(1) van die Biodiversiteitswet op Nasionale Omgewingsbestuur, 2004 (Wet Nr. 10 van 2004).
GN R.983 48 (iii)	Die uitbreiding van (iii) brûe waar die brug se grootte met 100 vierkante meter of meer uitgebrei word; waar sodanige ontwikkeling plaasvind – (a) binne 'n rivierloop; (b) voor 'n ontwikkelingsbeperking; of (c) indien geen ontwikkelingsbeperking bestaan nie, binne 32 meter vanaf 'n rivierloop, gemeet vanaf die oewer/kant van die rivierloop.
GN R.983 56 (i) en (ii)	Die verbreding van 'n pad met meer as 6 meter, of die verlenging van 'n pad met meer as 1 kilometer – (i) waar die bestaande reserwe breër is as 13.5 meter; of (ii) waar geen reserwe bestaan nie, waar die bestaande pad breër as 8 meter is.
GN R.984 1	Die ontwikkeling van fasiliteite of infrastruktuur vir die opwekking van elektrisiteit vanaf 'n hernubare hulpbron en waar die elektrisiteitsuitset 20 megawatt of meer is.
GN R.984 15	Die uitkap van 20 hektaar of meer inheemse plantegroei, uitsluitend waar sodanige skoonmaakproses vereis word vir (i) die deurvoer van 'n liniêre aktiwiteit; of (ii) instandhouding onderneem ooreenkomstig 'n instandhoudingsplan.
GN R.985 4	Die bou van 'n pad breër as 4 meter met 'n reserwe minder as 13.5 meter. (a) In die Noord-Kaap: (ii) areas buite stedelike gebiede; (aa) 'n beskermde gebied geïdentifiseer ingevolge NEMPAA, uitsluitend versteurde gebiede; (bb) Fokus op Uitbreidingsstrategie van Nasionale Beskermdes Gebiede; (ee) Kritiese biodiversiteitsgebiede of ekosisteem-diensareas soos geïdentifiseer in biodiversiteitsplanne wat deur die gemagtigde owerheid of in biostreeksplanne goedgekeur is. (b) In die Oos-Kaap (ii) buite stedelike gebiede; (aa) 'n beskermde gebied geïdentifiseer ingevolge NEMPAA, uitsluitend versteurde gebiede; (bb) Fokus op

	Uitbreidingstrategie van Nasionale Beskernde Gebiede; (ee) Kritiese biodiversiteitsgebiede of ekosisteem-diensareas soos geïdentifiseer in biodiversiteitsplanne wat deur die gemagtigde owerheid of in biostreeksplanne goedgekeur is.
GN R.985 14	Die ontwikkeling van (iii) brûe groter as 10 vierkante meter; (x) geboue groter as 10 vierkante meter en (xi) infrastruktuur of strukture met 'n fisieke voetspoor van 10 vierkante meter of groter; Waar sodanige ontwikkeling plaasvind – (a) binne 'n rivierloop en (c) indien geen ontwikkelingsbeperking aanvaar is nie, binne 32 meter van 'n rivierloop, gemeet vanaf die oewer/kant van die rivierloop. (a) In die Noord-Kaap: (c) In die Oos-Kaap (ii) buite stedelike gebiede, in: (aa) 'n beskernde gebied geïdentifiseer ingevolge NEMPAA, uitsluitend versteurde gebiede; (bb) Fokus op Uitbreidingstrategie vir Nasionale Beskernde Gebiede; (ee) Kritiese biodiversiteitsgebiede of ekosisteem-diensareas soos geïdentifiseer in biodiversiteitsplanne wat deur die gemagtigde owerheid of in biostreeksplanne goedgekeur is.
GN R.984 18 (a)	Die verbreding van 'n pad met meer as 4 meter; of die verlenging van 'n pad met meer as 1 kilometer (a) in die Noord-Kaap: (ii) Alle gebiede buite stedelike gebiede: (aa) 'n beskernde gebied geïdentifiseer ingevolge NEMPAA, uitsluitende versteurde gebiede; (bb) Fokus op Uitbreidingstrategie van Nasionale Beskernde Gebiede; (ee) Kritiese biodiversiteitsgebiede of ekosisteem-diensareas soos geïdentifiseer in biodiversiteitsplanne wat deur die gemagtigde owerheid of in biostreeksplanne goedgekeur is.

## VOORLOPIGE IDENTIFIKASIE VAN IMPAK

Die EIA-proses sal die potensiële impak van die ontwikkeling voortspruitend uit sy konstruksie en bedryf ondersoek. Hierdie impak sal deur die EAP (omgewingsassesseringspraktisyn) en 'n span aangestelde spesialiste geassesseer word. Tot op hede is die behoefte aan ondersoek deur spesialiste geïdentifiseer en die spesialiste aangestel soos hieronder beskryf. Verdere potensiële impakte kan gedurende die omvangbepalingsfase geïdentifiseer en by hierdie lys gevoeg word.

**Tabel 3: Spesialis-assesserings**

Soort impak	Aangestelde spesialis	Impak-assessering
<b>Impak-assessering en monitering van voëls</b>	Chris van Rooyen Consulting: Mnr. Chris van Rooyen	Die belangrikste potensiële soorte impak op avifauna van WEF's en gepaardgaande infrastruktuur is: <ul style="list-style-type: none"> <li>•Vlieg teen turbines vas;</li> <li>•Elektrokusie (skok);</li> <li>•Vlieg teen kragdrade vas;</li> <li>•Versteuring en verjaging;</li> <li>•Ontwrigting van voëlbewegings; en</li> <li>•Habitatvernietiging.</li> </ul> Die impak-assesseringstudie sal die 12 maande van monitering op die terrein ooreenkomstig die Riglyne vir Beste Praktiek rakende voëls en windkrag insluit.
<b>Impak-assessering en monitering van vlermuise</b>	Animalia: Mnr. Werner Marais	WEF's kan potensiëel 'n direkte impak op vlermuise hê as gevolg van botsings en barotrauma wat die dood veroorsaak. Maar daar is ook 'n indirekte gevolg moontlik deur die modifikasie van habitats. Die impak-assesseringstudie sal 12 maande van monitering op die terrein insluit, wat gedoen sal word ooreenkomstig die Suid-Afrikaanse Riglyne oor Goeie Praktiek vir ondersoek na vlermuise in die voorkonstruksiefase van windkrag-fasiliteite.
<b>Aard-ekologiese impak-assessering (flora en fauna)</b>	Simon Todd Consulting: Mnr. Simon Todd	Enige vorm van ontwikkeling het die potensiaal van 'n impak op flora en fauna. Dit sluit die uitwissing van belangrike habitat van flora en fauna in. Die impak-assesseringstudie deur 'n spesialis sal die omvang hiervan, indien enige, van die voorgestelde ontwikkeling op flora en fauna ondersoek.
<b>Erfenisimpak-assessering</b>	ACO Associates: Dr. Tim Hart	Enige vorm van ontwikkeling kan 'n impak op belangrike en onbekende erfenis-, argeologiese en paleontologiese kenmerke hê. Die impakassessering deur 'n spesialis sal die omvang, indien enige, van die voorgestelde ontwikkeling op hierdie kenmerke ondersoek.
<b>Paleontologie-assessering</b>	Dr. John Almond (via ACO Associates)	

<b>Water-/Vleiland-assessering</b>	Scherman Colloty and Associates: Dr. Brian Colloty	Potensiële uitwerkings van die voorgestelde ontwikkeling op rivierlope en vleilande sal deur hierdie studie geassesseer word. Indien vereis, sal 'n watergebruikslisensie vir die voorgestelde ontwikkeling voorgelê word.
<b>Geraasimpak-assessering</b>	Enviro-Acoustics Research: Mnr. Morne de Jager	Die potensiële uitwerking van geraas vanaf die windturbines en potensiële versteuring veroorsaak deur swaar konstruksievoertuie en hyskrane, die berging van materiaal, konstruksie van kampe en uitgrawings vir leengroewe, insluitend stof en geraas, sal in die geraasimpak-assesseringstudie ondersoek word.
<b>Visuele en landskap-assessering</b>	Bernard Oberholzer Landskap-argitekte en Meirelles Lawson Burger Argitekte: Mnr. Bernard Oberholzer en Mnr. Quinton Lawson	WEF's kan visueel inbreuk maak op die horison en natuuruitsigte weens die aantal en hoogte van windturbines. Die visuele-impakassesseringstudie sal gedoen word om die sigbaarheid van die voorgestelde ontwikkeling sowel as die identifisering van belangrike uitsigpunte en uitsigstrokke te bepaal en 'n fotografiese opname te doen vanaf geselekteerde uitsigpunte, met inagneming van moontlike sensitiewe reseptore.
<b>Grond en landbou</b>	Landbou-navorsingsraad: Mnr. Gary Patterson	Potensiële uitwerking van die voorgestelde ontwikkeling op grondgehalte, sowel as die landboupotensiaal van die terrein sal met behulp van hierdie studie bepaal word.
<b>Maatskaplike impak-assessering</b>	Tony Barbour Omgewingskonsultant en Navorsers: Mnr. Tony Barbour	Die potensiële maatskaplik-ekonomiese uitwerkings van die voorgestelde ontwikkeling op die omliggende gemeenskappe sal deur die spesialis geassesseer word.

Die sleutelstappe in 'n tipiese EIA-proses word in Figuur 2 getoon en hieronder beskryf:

**Aanvanklike kennisgewing en oproep om as I&AP's te registreer:** Advertensies, terreinkennisgewings, plakkate, en briewe aan grondeienaars en vooraf geïdentifiseerde I&AP's dien as uitnodiging aan lede van die publiek om op die projek se I&AP-databasis te registreer. Die doel met hierdie stap is om die publiek oor die voorgestelde ontwikkeling in te lig en aanvanklike kommentaar en terugvoering aan te moedig.

**Omvangbepalingsfase:** Dit sluit in die samevatting van aanvanklike kommentaar, bekommernisse, besware en spesialisbevindings in 'n bondige verslag (Omvangbepalingsverslag), wat terugvoering oor die volgende verskaf:

- Aard van die aktiwiteit;
- Beskrywing van die ontvangsomgewing;
- Beskrywing van spesialisondersoeke wat gedoen moet word;
- Identifikasie van potensieel haalbare alternatiewe;
- Identifikasie van potensieel positiewe en negatiewe impakte; en

- Identifikasie van gapings weens gebrekkige kennis.
- **EIA-fase:** Die primêre doel van hierdie fase is om die impak op die omgewing van die onderskeie geïdentifiseerde alternatiewe te ondersoek en vergelykenderwys te assesser en 'n voorkeur-alternatief vir oorweging deur die DEA aan te beveel. Daarby word die geïdentifiseerde impakte geassesseer en relevante maatreëls vir die bestuur en beperking daarvan gelys vir insluiting in 'n Omgewingsbestuursprogram (EMPr). Die EIA word afgesluit met die opstel van 'n EIA-verslag wat na die DEA gestuur word met die oog op 'n besluit.

**Deurlopende openbare oorlegpleging:** Regdeur die proses sal die publiek en spesifiek geregistreerde I&AP's betrek en met hulle oorleg gepleeg word. Dit kan geskied deur die verspreiding van inligting deur middel van openbare vergaderings en fokusgroep-byeenkomste, konsepverslae (omvangbepaling & EIA), en projekbywerkings. I&AP's word aangemoedig om sover moontlik deel te neem.

Sodra die EIA-fase voltooi is en die Finale Omgewingsimpak-assesseringsverslag aan die bevoegde owerheid (DEA) voorgelê is, sal die DEA die aansoek oorweeg en 'n ingeligte besluit neem. I&AP's sal oor die besluit en hul reg tot appèl in die geval dat hulle nie met die besluit saamstem nie, ingelig word.

## HOE OM BETROKKE TE RAAK

I&AP's word genooi om uit die staanspoor deel te raak van die projek se proses van openbare deelname. Kommentaar, besware en advies geopper deur I&AP's sal help om die EIA-proses te rig en die gehalte van beskikbare inligting vir besluitneming deur die owerhede te verbeter.

As 'n I&AP moet jy **seker maak dat jy geregistreer is** vir die projek en dat jy jou kommentaar binne die vasgestelde spertye en volgens die besonderhede, soos in hierdie dokument verskaf, aan Arcus stuur.

### **Jy kan betrokke raak deur:**



Jouself per e-pos, faks, brief of foon as 'n I&AP te registreer;

Die registrasievorm/vraelys in te dien en dit te pos, of te faks na die kontakpersoon wat aangegee word;

Die oop dae/openbare vergaderings (soos van toepassing) by te woon. As 'n geregistreerde I&AP sal jy outomaties na hierdie geleentheid genooi word;

Die konsepte van die Omvangbepaling- en EIA-verslag deur te gaan en binne die toegelate oorsigtydperk daarop kommentaar te lewer; en

Die kontakpersone hieronder met jou kommentaar, navrae, voorstelle, of versoek vir meer inligting oor die projek te nader.

Om jou betrokkenheid by hierdie EIA-proses te verseker, registreer asseblief by Arcus deur jou inligting (naam, kontakbesonderhede, belang by die projek) te stuur aan:

Arcus Renewable Energy Consulting Bpk.

Kantoor 220 Cube Workspace

H/v Langstraat en Hans Strijdomweg, Kaapstad, 8001

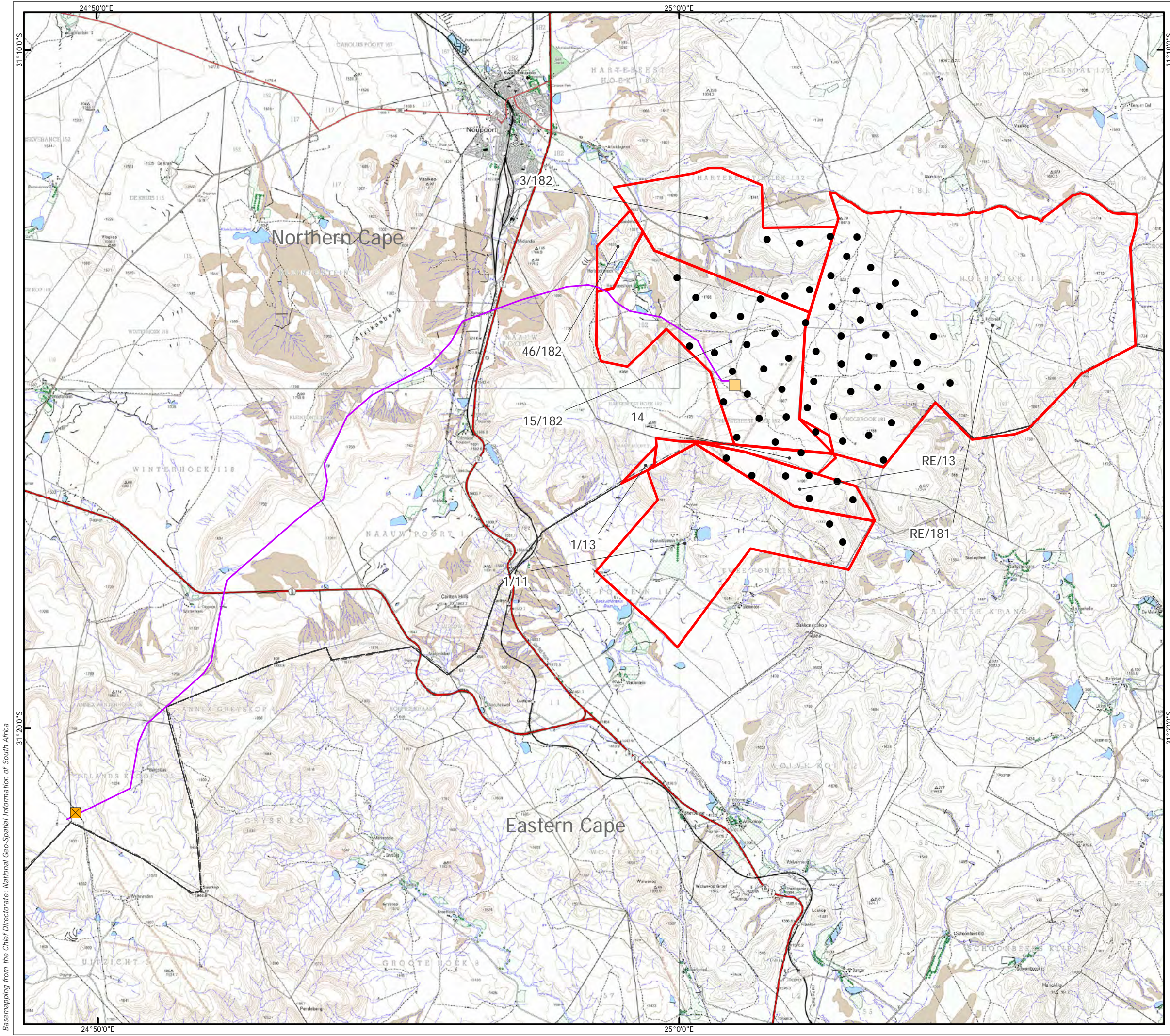
Telefoon: +27 21 412 1529

Faks: +27 86 762 2885

E-pos: [sankraal@arcusconsulting.co.za](mailto:sankraal@arcusconsulting.co.za)

Arcus-verwysing: 2244 San Kraal





Basemapping from the Chief Directorate: National Geo-Spatial Information of South Africa



- Site Boundary
- Proposed Turbine Layout
- Proposed Grid Connection
- Proposed San Kraal Substation
- Umsobomvu Eskom 400/132kV Substation



1:100,000 Scale @ A3

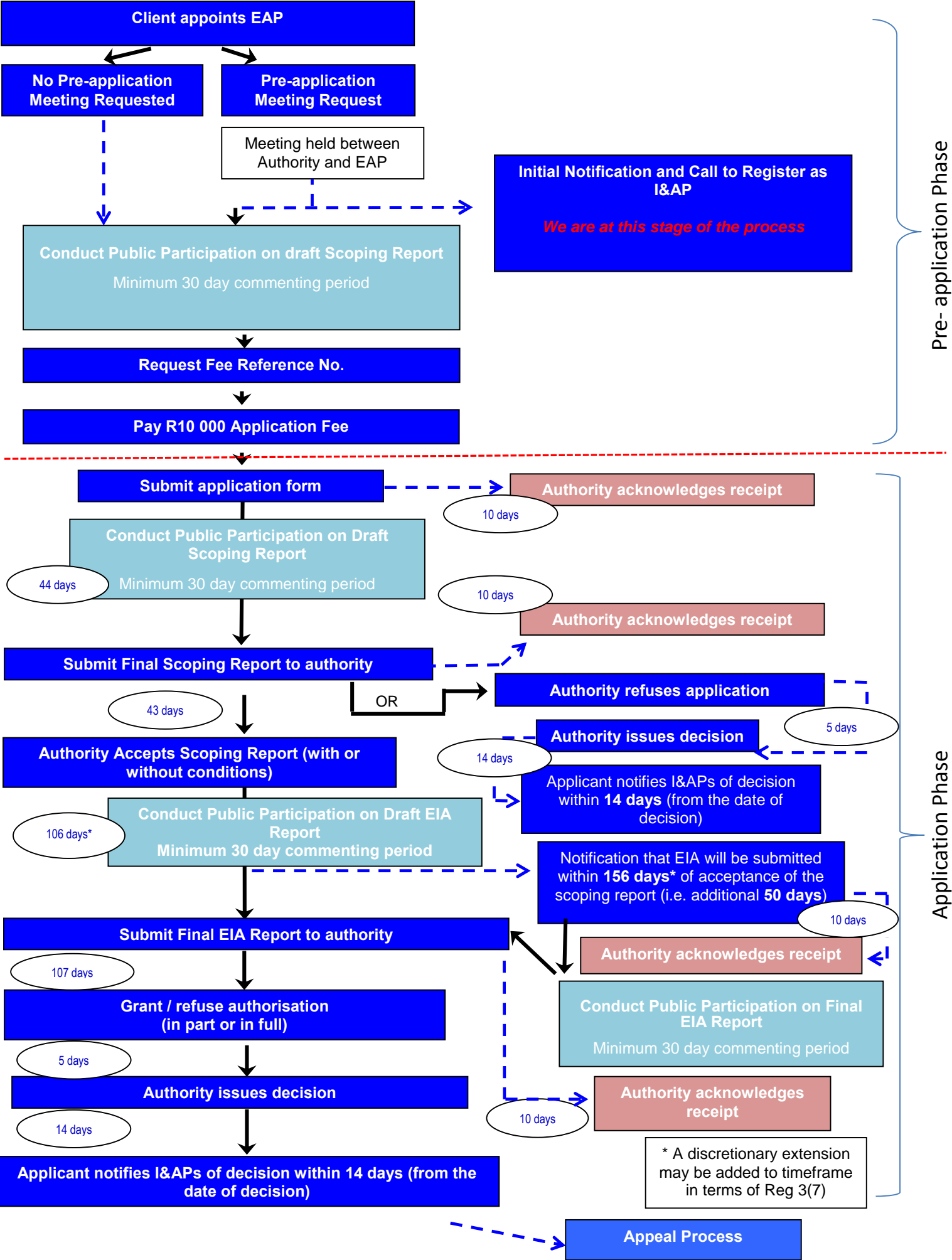
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Produced: AT      Ref: 2244/PUB/001  
 Reviewed: SC      Date: 04/05/2016  
 Approved: AB

Proposed Site Development Map  
Figure 1

San Kraal Wind Energy Facility  
Background Information Document

# SCOPING / EIR PROCESS



**NOTIFICATION OF ENVIRONMENTAL IMPACT ASSESSMENT PROCESS: PROPOSED SAN KRAAL WIND ENERGY FACILITY, EASTERN AND NORTHERN CAPE PROVINCES**

Notice is hereby given of a Public Participation Process to be undertaken in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

**DEA Reference Number:** To be allocated upon submission of application.

- **Nature and Location of Activity:** San Kraal Wind Power (Pty) Ltd intend to develop the San Kraal Wind Energy Facility and associated grid connections, with a maximum generation capacity of 140MW. The San Kraal Wind Energy Facility would be located in the Northern Cape Province, with a small portion also being located across the border of the Eastern Cape Province, approximately 58 -59 km south of Colesberg and 6 km south east of the town of Noupoort in the Northern Cape, bordering the Eastern Cape.

**An application for a Scoping and Environmental Impact Assessment process for the proposed development will be submitted to the competent authority, the Department of Environmental Affairs (DEA), for a decision.**

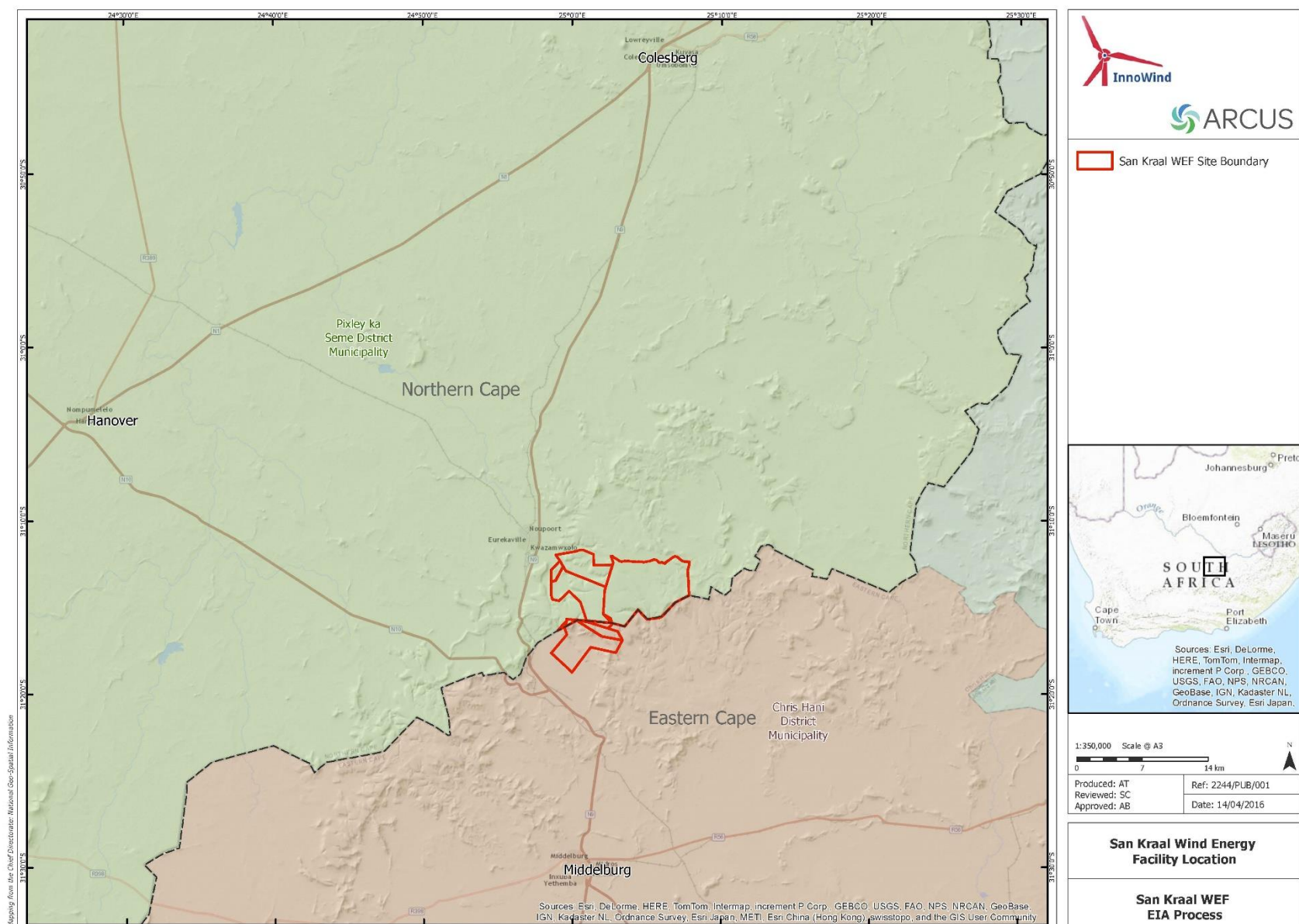
**Listed Activities:** LN1 GN R983\_11(i); 12 (iii, x, xii); 19 (i); 24 (ii); 27; 48 (iii); 56 (i, ii). LN2 GN R984 1; 2; 15. 4 (a)(ii) & (b)(ii); 10(a)(ii) & (b)(ii); 12(a)(ii) & (d)(ii); 14 (a)(ii) & (c)(ii); 18 (a)(ii) & (b)(ii); 23(a)(ii) & (b)(ii).

Should you wish to be registered as an **Interested and Affected Party (I&AP)** and/or receive a copy of the **Background Information Document (BID)**, please respond to this notification by submitting your name, interest in the project, email address, postal address and telephone number as well as any comments in writing to the address below:

**Correspondence throughout the remainder of the PPP and EIA Process will only be distributed to Registered I&APs. Registration is possible throughout the EIA Process.**

In order to ensure your involvement in this EIA process, please register with Arcus by submitting your contact information (name, contact details, interest in the project to:

Arcus Renewable Energy Consulting Ltd  
 Office 220 Cube Workspace  
 Cnr Long Street and Hans Strijdom Road, Cape Town, 8001  
 Telephone: +27 21 412 1529  
 Fax: +27 86 762 2885  
 Email: [sankraal@arcusconsulting.co.za](mailto:sankraal@arcusconsulting.co.za)  
 Arcus Reference: 2244 San Kraal



**KENNISGEWING VAN OMGEWINGSIMPAK-ASSESSERINGSPROSES: VOORGESTELDE SAN KRAAL-WINDKRAGFASILITEIT, OOS- EN NOORD-KAAP**

Kennis word hiermee gegee dat 'n Proses van Openbare Deelname (PPP) ingevolge die Wet op Nasionale Omgewingsbestuur, 1998 (Wet Nr. 107 van 1998), soos gewysig, onderneem word.

**DEA se verwysingsnommer:** Sal toegeken word by indiening van aansoek.

- **Aard en ligging van aktiwiteit:** San Kraal Wind Power (Edms.) Bpk. beoog om die San Kraal-windkragfasiliteit en gepaardgaande netwerkverbinding met 'n maksimum opwekkingsvermoë van 140 MW op te rig. Die San Kraal-windkragfasiliteit sal in die Noord-Kaap geleë wees, met 'n klein gedeelte wat oor die grens van die naasliggende Oos-Kaap sal strek. Die terrein is 58-59 km suid van Colesberg en 6 km suidoos van die dorp Noupoort in die Noord-Kaap en grens aan die Oos-Kaap.

'n Aansoek om 'n Omvangbepaling- en Omgewingsimpak-assesseringsproses vir die voorgestelde ontwikkeling sal aan die bevoegde owerheid, die Departement van Omgewingsake (DEA), vir 'n besluit voorgelê word.

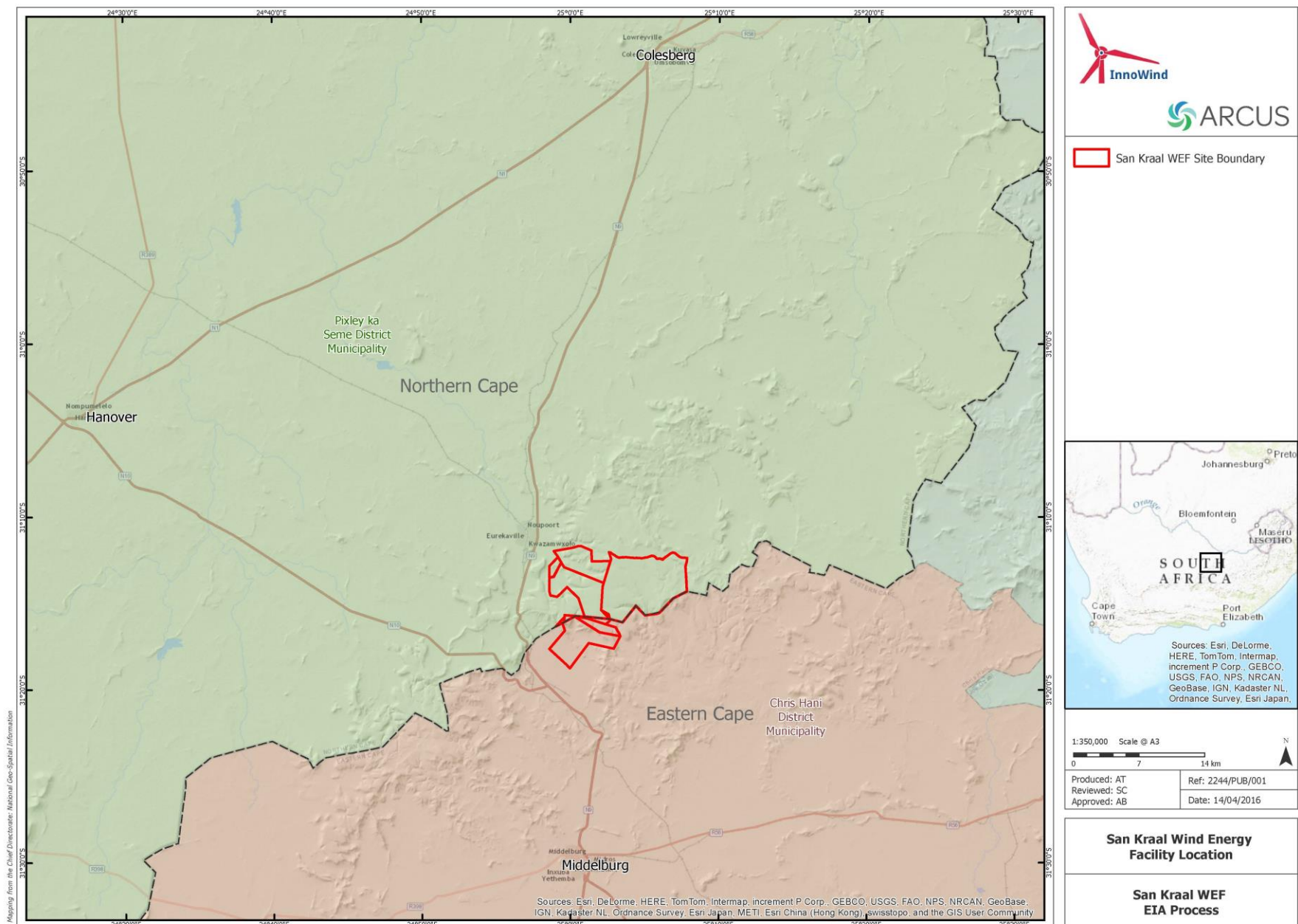
**Gelyste aktiwiteite:** LN1 GN R983\_11(i); 12 (iii, x, xii); 19 (i); 24 (ii); 27; 48 (iii); 56 (i, ii). LN2 GN R984\_1; 2; 15. 4 (a)(ii) & (b)(ii); 10(a)(ii) & (b)(ii); 12(a)(ii) & (d)(ii); 14 (a)(ii) & (c)(ii); 18 (a)(ii) & (b)(ii); 23(a)(ii) & (b)(ii).

Indien jy as 'n **Belanghebbende en Geaffekteerde Party (I&AP)** wil registreer en/of 'n afskrif van die **Agtergrondinligtingsdokument (BID)** wil ontvang, reageer asseblief op hierdie kennisgewing deur jou naam, belang by die projek, e-posadres, posadres en telefoonnommer, sowel as enige skriftelike kommentaar aan die adres hieronder te stuur:

**Korrespondensie in die res van die PPP- en EIA-proses sal slegs aan geregistreerde I&AP's gestuur word. Registrasie is in die loop van die hele EIA-proses moontlik.**

Om jou betrokkenheid by hierdie EIA-proses te verseker, registreer asseblief by Arcus deur jou inligting (naam, kontakbesonderhede, belang by die projek) in te dien by:

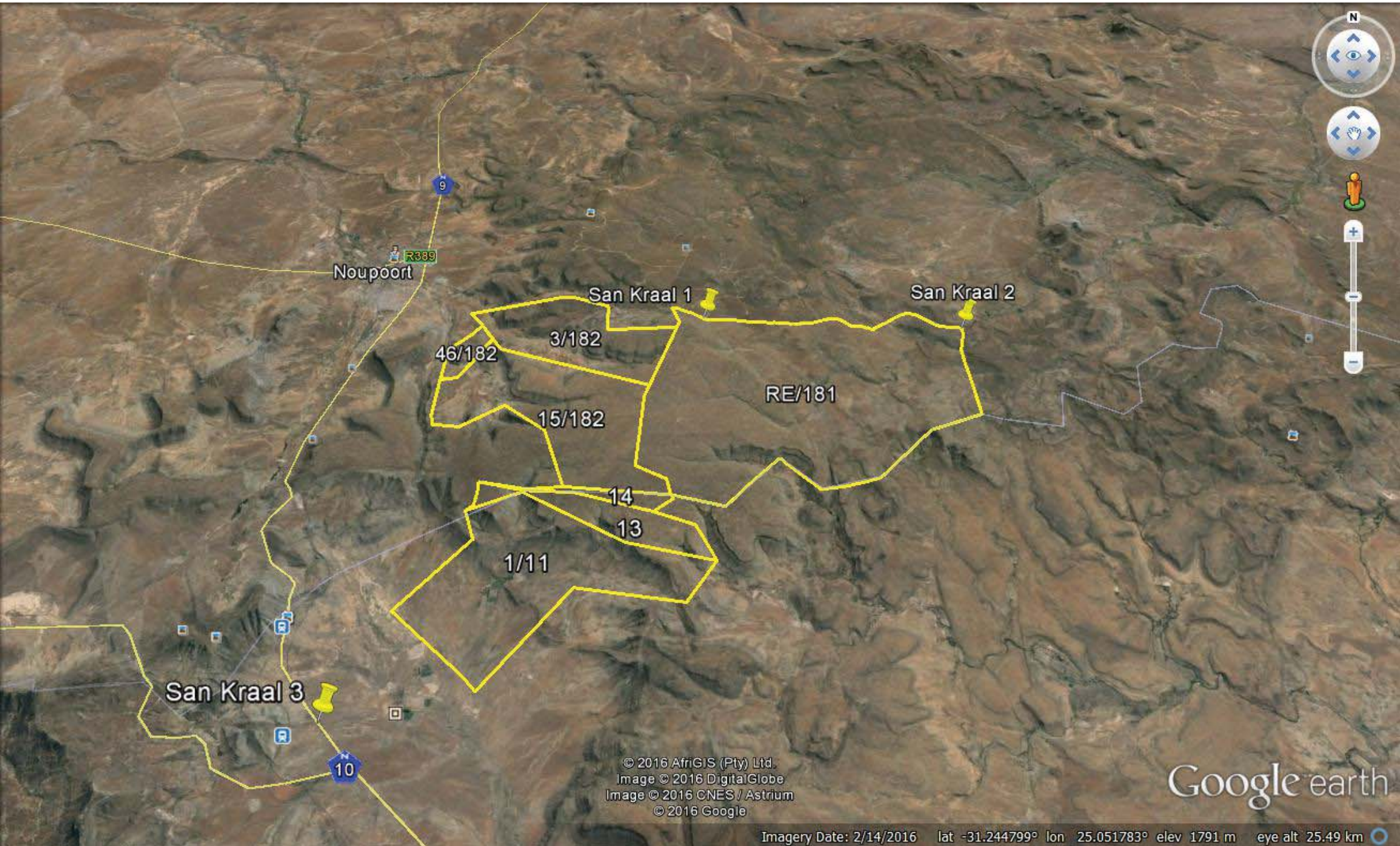
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Faks: +27 86 762 2885  
E-pos: sankraal@arcusconsulting.co.za  
Arcus-verwysing: 2244 San Kraal



## Site Notices Placed on the Boundary of San Kraal WEF

	<b>Latitude</b>	<b>Longitude</b>
<b>Site Notice 1</b>	-31.206288°	25.052795°
<b>Site Notice 2</b>	-31.207098°	25.130786°
<b>Site Notice 3</b>	-31.321227°	24.964973°

\*A3 Posters and Background Information Documents were left at Noupoort Police Station, in town



Noupoort

San Kraal 1

San Kraal 2

San Kraal 3

46/182

3/182

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15/182

14

13

1/11

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Imagery Date: 2/14/2016 lat -31.244799° lon 25.051783° elev 1791 m eye alt 25.49 km







