Scatec Solar
Improving our future™

BACKGROUND INFORMATION DOCUMENT

Basic Assessment, and Scoping, and Environmental Impact Assessment

for the proposed Development of three Solar Photovoltaic Facilities and associated Electrical Infrastructure north-east of Kenhardt, Northern Cape Province

CSIR Reference: EMS0102/Scatec/2015

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1. INTRODUCTION TO THE PROPOSED PROJECT

Scatec Solar SA 163 (PTY) Ltd (hereinafter referred to as Scatec Solar) is proposing to develop three 75 Megawatt (MW) Solar Photovoltaic (PV) power generation facilities and associated electrical infrastructure (132 kV transmission lines for each 75 MW facility) on the remaining extent of Onder Rugzeer Farm 168 and the connection points to the substation on the remaining extent of Portion 3 of Gemsbok Bult Farm 120, approximately 80 km south of Upington and 30 km north-east of Kenhardt within the !Kheis Local Municipality, Northern Cape Province.

Scatec Solar is an integrated independent power producer that is focused on making solar energy a sustainable and affordable source on a global scale. Scatec Solar was founded in 2001 and holds its headquarters in Norway. The company develops, builds, owns and operates a number of solar power plants internationally and within Africa. The company is growing significantly and is currently planned to provide a combined 207 MW of power in the United States, Honduras and Jordan. In addition, Scatec Solar collectively delivers more than 219 MW of power in the Czech Republic, South Africa and Rwanda. Specifically linked to investment within South Africa, Scatec Solar has been involved in the following major solar energy projects:

- The Linde Solar Plant (40 MW) is located in the Northern Cape and is considered to be the first of the large-scale PV plants in production from the second round of the Renewable Energy Independent Power Producer Programme (REIPPP).
- The Dreunberg Solar Plant (75 MW) is the only REIPPP Solar PV Project to be located in the Eastern Cape.
- The Kalkbult Solar Plant (75 MW) is located in the Northern Cape and was the first REIPPP project to be connected to the grid and operational in South Africa.

Linked to enhancing its operations within South Africa, each 75 MW Solar PV facility proposed by Scatec Solar will cover an approximate area of 200 hectares (ha) and will be constructed adjacent to each other (with a collective footprint of approximately 600 ha and a combined power generation capacity of 225 MW). The proposed projects are located in proximity to the Eskom Nieuwehoop Substation (which is currently being constructed on the farm Gemsbok Bult (remaining extent of Portion 3 of Farm 120)). Each proposed 132 kV transmission line will link to the Eskom Nieuwehoop Substation.

Separate Applications for Environmental Authorisation (EA) will be lodged with the Competent Authority (i.e. the National Department of Environmental Affairs (DEA)) for each proposed 75 MW Solar PV facility and transmission line, which will be referred to as:

Scoping and EIA Processes: Proposed 75 MW Solar PV Facilities	Basic Assessment Processes: Proposed 132 kV Transmission Lines
• Kenhardt PV 1 • Kenhardt PV 2 • Kenhardt PV 3	• Kenhardt PV 1 – Transmission Line • Kenhardt PV 2 – Transmission Line • Kenhardt PV 3 – Transmission Line

The Project Applicant for each of the above proposed projects will be various subsidiaries and divisions of Scatec Solar.

In terms of the National Environmental Management Act (Act 107 of 1998, as amended) (NEMA) and the 2014 NEMA Environmental Impact Assessment (EIA) Regulations promulgated in Government Gazette 38282 and Government Notice (GN) R982, R983, R984 and R985 on 8 December 2014, the proposed projects require a full Scoping and EIA Process for the construction of the three Solar PV facilities. A separate Basic Assessment Process is also required and will be undertaken for the development of the proposed transmission lines. The CSIR has been appointed to undertake the requisite Basic Assessment and EIA Process for the proposed projects.

Since the proposed 75 MW Solar PV facilities are located within the same geographical area and constitute the same type of activity, an integrated Public Participation Process (PPP) will be undertaken for the proposed projects. However, as mentioned above, separate Applications for EA will be lodged with the National DEA for each proposed project and as such, separate reports (i.e. Basic Assessment and Scoping and EIA Reports) will be compiled for each project.

2. NEED AND JUSTIFICATION FOR THE PROPOSED PROJECTS

At a national level, South Africa is facing serious electricity shortages as well as water scarcity. Linked to this, the proposed projects aim to supply additional electricity to the national grid. Furthermore, the urgent need to reduce greenhouse gas emissions and the importance of a secure and diversified energy supply has resulted in a global shift towards, and an increased focus on, the use of renewable energy technologies. In South Africa, national government has encouraged the utilisation of renewable energy through national policy and strategic planning. The objective is to expand electricity generation capacity in South Africa and promote the practice of sustainable development.

The Integrated Resource Plan for South Africa for the period 2010 to 2030 (hereinafter referred to as "IRP 2010") was released by government in 2010 and proposes to develop and secure 17 800 MW of renewable energy capacity by 2030 (including wind, solar and other energy sources). The IRP 2010 has set up a target of 3 725 MW of renewable energy to be produced by Independent Power Producers (IPPs) by 2016.

Linked to this, in 2011, the Department of Energy (DOE) launched the REIPPP and invited potential IPPs to submit proposals for the financing, construction, operation and maintenance of the first 3 725 MW of onshore wind, solar thermal, solar PV, biomass, biogas, landfill gas or small hydro projects. The two main evaluation criteria for compliant proposals are price and economic development, with other selection criteria including technical feasibility and grid connectivity, environmental acceptability, black economic empowerment, community development, and local economic and manufacturing propositions. The bidders with the highest rankings (according to the aforementioned criteria) are appointed as "Preferred Bidders" by the DoE.

The proposed projects aim to contribute to the above strategic imperative.

3. WHAT DOES THIS DOCUMENT TELL YOU?

This Background Information Document (BID) provides you, as an Interested and Affected Party (I&AP), with:

- Background information on the proposed projects;
- A description of the Basic Assessment and EIA and Public Participation Processes that will be undertaken for the proposed projects; and
- Details on how to register your interest in the projects and receive further information.

As a registered I&AP, there will be opportunities for you to be involved in the Basic Assessment and Scoping and EIA Processes through receiving information, registering your interest on the project database, raising issues of concern and commenting on reports. The input from I&APs, together with the information and assessment provided by the Environmental Assessment Practitioner and relevant specialists, will assist the National DEA with their decision-making in terms of whether to grant or refuse EA for the proposed projects.

4. WHAT DO THE PROPOSED PROJECTS ENTAIL?

The locality map (Figure 1) included with this BID provides an overview of the proposed locality of the projects on the remaining extent of Onder Rugzeer Farm 168 and their connection points on the remaining extent of Portion 3 of Gemsbok Bult Farm 120, north-east of Kenhardt in the Northern Cape. The proposed projects will take place on land that is owned by a third party, and as such consent will be obtained from the landowner accordingly. It is anticipated that the property on which the proposed projects will be constructed will be leased from the landowner.

Each Solar PV facility will consist of the components listed below. The components and their dimensions will be discussed within the relevant Basic Assessment and Scoping and EIA Reports produced for each facility:

Solar Field

- Solar Arrays
- Building infrastructure
  - Offices;
  - Operational control centre;
  - Warehouse/workshop;
  - Ablution facilities; and
  - Converter station.

Associated Infrastructure

- Electrical infrastructure (including transmission lines and substations);
- Access roads;
- Internal gravel roads;
- Fencing;
- Operation and Maintenance Area;
- Laydown Area;
- Stormwater channels; and
- Water pipelines.

5. ENVIRONMENTAL AUTHORISATION

In terms of the NEMA and the 2014 NEMA EIA Regulations published in GN R982, R983, R984 and R985 on 8 December 2014 in Government Gazette 38282, notice is hereby given that a Basic Assessment and full Scoping and EIA Process are required as the proposed projects include, amongst others, the following activities shown in Tables 1 and 2. Tables 1 and 2 indicate the applicable listed activities together with a summary of the listed activity in the context of the proposed project activities.

Table 1: Listed Activities for the Basic Assessment Processes – Proposed Transmission Lines

Relevant Notice and Activity Number	Description of the planned activity that relates to the applicable listed activity
GN R983: Activity 11 (i)	The proposed project will entail the construction and installation of a total of three overhead transmission lines with a capacity of 132 kV each. One transmission line will be constructed for each 75 MW Solar PV facility. The proposed project will take place on the remaining extent of Onder Rugzeer Farm 168 and the connection points to the substation will take place on the remaining extent of Portion 3 of Gemsbok Bult Farm 120, north-east of Kenhardt in the Northern Cape Province, outside an urban area.

Table 2: Listed Activities for the Scoping and EIA Processes – Proposed 75 MW Solar PV Facilities

Relevant Notice and Activity Number	Description of the planned activity that relates to the applicable listed activity
GN R983: Activity 9 (i) and (ii)	The proposed project will entail the construction of stormwater channels and water pipelines. These structures may exceed 1000 m in length, may have an internal diameter of 0.36 m or more, and possibly a peak throughput of 120 l/s or more.
GN R983: Activity 12 (x) and (xii)	Each proposed 75 MW Solar PV facility will entail the construction of building infrastructure and structures (such as the solar field, offices, workshops, ablution facilities, on-site substations, laydown areas and security enclosures). The buildings and infrastructure are expected to exceed a footprint of 100 m^2 and some of which are likely to occur within 32 m of a watercourse.
GN R983: Activity 19 (i)	The proposed project **may** entail the excavation, removal and moving of more than 5 m^3 of soil, sand, pebbles or rock from the nearby watercourse. The proposed project **may** also entail the infilling of more than 5 m^3 of material into the nearby watercourse.
GN R983: Activity 24 (ii)	The proposed project will entail the construction of internal access roads. These roads could possibly be wider than 8 m (without a road reserve).
GN R983: Activity 28 (ii)	The proposed project will take place on the remaining extent of Onder Rugzeer Farm 168 and the connection points to the substation will take place on the remaining extent of Portion 3 of Gemsbok Bult Farm 120, north-east of Kenhardt in the Northern Cape. It is understood that the land is currently used for agricultural purposes. The proposed projects (i.e. commercial/industrial development) will cover a total combined footprint of approximately 600 ha.
GN R984: Activity 1	The proposed project will entail the construction of three 75 MW Solar PV facilities (i.e. facilities for the generation of electricity from a renewable resource). The proposed project will take place on the farm Onder Rugzeer 168 and the connection points to the substation will take place on the remaining extent of Portion 3 of Gemsbok Bult Farm 120, north-east of Kenhardt in the Northern Cape Province, outside an urban area.
GN R984: Activity 15	The total footprint of the proposed project is expected to be approximately 600 ha (i.e. 200 ha for each proposed 75 MW Solar PV facility). As a result, more than 20 ha or more of indigenous vegetation could possibly be removed for the construction of the proposed Solar PV facilities.

Note from the CSIR:
It is also important to note that a precautionary approach has been adopted by the CSIR when identifying listed activities, in that if there is any doubt at this stage of the project planning whether or not an activity is included in the project design, then the activity is listed. This list may be refined during the course of the Basic Assessment and Scoping and EIA Processes, and listed triggers may be removed or added as applicable.

The applicable listed activities require EA from the National DEA. The Basic Assessment and Scoping and EIA Process needs to show the Competent Authority, the National DEA, and the project proponent, Scatec Solar, the consequences their choices will have on the biophysical, social and economic environment. The steps in the Basic Assessment and Scoping and EIA Process are outlined below.

6. SCOPING AND EIA PROCESS

The Scoping and EIA Process being implemented can be summarised as follows:

Stage 1: Environmental Scoping:

This Scoping Process is being planned and conducted in a manner that is intended to provide sufficient information to enable the authorities to reach a decision regarding the scope of issues to be addressed in the EIA, and in particular to convey the range of specialist studies that will be included as part of the Environmental Impact Reporting Phase of the EIA, as well as the approach to these specialist studies. Within this context, the main objectives of this Scoping Process are to:

- Identify and inform a broad range of stakeholders about the proposed projects;
- Through a process of broad-based consultation with stakeholders, conduct an open, participatory and transparent Public Participation Process and facilitate the inclusion of any concerns and issues raised by stakeholders;
- Identify the relevant policies and legislation relevant to the proposed project;
- Provide the need and desirability of the proposed project, as well as the need and desirability of the project in the context of the preferred location;
- Identify and confirm the preferred activity, technology

alternative, and preferred site (i.e. clarify the scope and nature of the proposed activities and the alternatives being considered);
- Identify and document the key issues to be addressed in the subsequent EIA Phase;
- Confirm the level of assessment required, impact assessment methodology, and the specialist input; and
- Identify suitable measures to avoid, manage or mitigate identified impacts and to determine the extent of the residual risks that need to be managed and monitored.

Stage 2: EIA:

The purpose of this stage of the EIA Process is to:
- Undertake specialist investigations to address the issues of concern that have been raised and identified through the Scoping Process.
- Assess reasonable and feasible alternatives that form part of the proposed project (including the No Go Option);
- Determine the policy and legislative context of the proposed project;
- Describe the need and desirability of the proposed project, as well as the need and desirability of the project in the context of the preferred location;
- Identify the location of the proposed development footprint within the preferred site;
- Identify the most ideal location for the proposed activity within the preferred site;
- Identify, determine and assess the significance of the predicted impacts in line with the accepted Plan of Study for EIA;
- Recommend management actions to enhance positive benefits or avoid/minimise potential negative impacts (based on specialist input); and
- Identify residual risks that need to be managed and monitored.

The following specialist studies have been identified, at this stage, to form part of the EIA Phase of the proposed projects:
- Ecological Impact Assessment (including Terrestrial Ecology, Aquatic Ecology and Avifauna);
- Visual Impact Assessment;
- Heritage Impact Assessment (Archaeology and Cultural Landscape);
- Desktop Palaeontological Impact Assessment;
- Geohydrological Assessment;
- Soils and Agricultural Potential Assessment; and
- Social Impact Assessment

7. BASIC ASSESSMENT PROCESS

The objectives of the Basic Assessment Processes being implemented will be similar to that of the Scoping and EIA Processes as explained above. The proposed transmission lines will be assessed separately as part of a Basic Assessment Process in order to facilitate the administrative aspects surrounding the REIPPP evaluation process and potential transfer of the lines to Eskom. The abovementioned specialist studies undertaken for the Scoping and EIA Processes will feed into the Basic Assessment.

8. PUBLIC PARTICIPATION PROCESS

Public involvement forms an important component of the Basic Assessment and EIA Process by assisting in the identification of issues and alternatives to be evaluated. The following outlines the steps in the Public Participation Process which will be undertaken to run in parallel to the Basic Assessment and Scoping and EIA Processes.

Step 1: Notify Authorities and I&APs of the Basic Assessment and Scoping and EIA Processes (30 days)
The initial step entails providing notification to Authorities and potential I&APs of the proposed projects and the commencement of the Basic Assessment and Scoping and EIA Processes. An initial database of potential I&APs and Authorities will be compiled. Authorities and potential I&APs will be provided with a BID (i.e. this document), including a Comment and Registration Form and written notification. Advertisements will also be placed in a local newspaper during this phase. I&APs will be provided with a 30-day review period within which to raise any issues or concerns for inclusion in the Basic Assessment and Scoping Reports. During this review period, I&APs are required to register their interest on the project database in order to be included from the outset of the Basic Assessment and Scoping and EIA Processes.

Step 2: Preparation of Applications for EA, and Basic Assessment and Scoping Reports
Separate Applications for EA for each proposed 75 MW Solar PV facility and transmission line will be prepared (i.e. a total of six applications will be prepared). In addition, the Basic Assessment Reports will be compiled in line with Appendix 1 of the 2014 EIA Regulations (GN R982), and the Scoping Reports and Plan of Study for EIA will be compiled in line with Appendix 2 of the 2014 EIA Regulations (GN R982). All issues and concerns raised by the Authorities and I&APs during the review of the BID will be recorded and compiled into an Issues and Responses Trail for inclusion in the Basic Assessment and Scoping Reports.

Step 3: Submission of Applications for EA
Submit the Applications for EA for each proposed 75 MW Solar PV facility and transmission line (i.e. a total of six applications) to the National DEA for processing.

Step 4: Authority and I&AP Review of the Scoping Reports (30 days)
The Scoping Reports will be released to the public for a 30-day review period. All Authorities and registered I&APs on the project database will be notified in writing of the opportunity to review the Scoping Reports. A Comment and Registration Form will also be sent with the written notification to all registered stakeholders. Copies of the Scoping Reports will be placed on the project website (http://www.csir.co.za/eia/ScatecSolarPV/), and at the local public library.

Step 5: Submission of Scoping Reports to the National DEA for Decision-Making
The comments received from I&APs during the 30-day review of the Scoping Reports will be recorded into a comprehensive Issues and Responses Trail, and will be included in the Scoping Reports before submission to the National DEA. The Scoping Reports will thereafter be finalised and submitted to the National DEA for decision making. All registered I&APs on the project database will be notified of the submission of the Scoping Reports.

The National DEA will have 43 days (from receipt of the Scoping Reports) to either accept the Scoping Reports with or without conditions, or refuse EA.

Step 6: Undertake Specialist Studies and Preparation of Basic Assessment and EIA Reports (including the Environmental Management Programme (EMPr))
Once the National DEA accepts the Scoping Reports, the Impact Assessment Phase may commence.

During this phase, the specialist studies (as listed above) will be undertaken and the EIA Reports (including the EMPr) will be compiled in line with the 2014 EIA Regulations and the accepted Plan of Study for EIA.

During this phase, the Basic Assessment Reports (including the EMPr) will also be compiled in line with the 2014 EIA Regulations.

Step 7: Authority and I&AP Review of the Basic Assessment and EIA Reports and EMPr (30 days)
During this phase, the Basic Assessment and EIA Reports will be released to the public for a 30-day review period. All Authorities and registered I&APs on the project database will be notified in writing of the opportunity to review the EIA Reports. A Comment and Registration Form will also be sent with the written notification to all registered stakeholders. Copies of the Basic Assessment and EIA Reports will be placed on the project website (http://www.csir.co.za/eia/ScatecSolarPV/), and at the local public library.

Step 8: Submission of the Basic Assessment and EIA Reports to the National DEA for Decision-Making
A key component of the Basic Assessment and EIA Process is documenting and responding to the comments received from I&APs and Authorities. The comments received from I&APs during the 30-day review of the Basic Assessment and EIA Reports will be recorded into a comprehensive Comments and Responses Trail, and will be included in the EIA Reports before submission to the National DEA. The Comments and Responses Trail will indicate the nature of the comment, when and who raised the comment, as well as indicate how the comment received has been considered in the Basic Assessment and EIA Reports, in the project design or the EMPr. The Basic Assessment and EIA Reports will thereafter be finalised and submitted to the National DEA for decision making. All registered I&APs on the project database will be notified of the submission of the Basic Assessment and EIA Reports.

The National DEA will have 10 days (from receipt of the EIA Reports) to acknowledge the reports and will thereafter have 107 days to grant or refuse EA.

Step 9: Notification of Environmental Decision and Appeal Period
All registered stakeholders on the project database will be notified in writing of the environmental decision for the proposed projects, and will be informed of the opportunity to appeal.

HOW CAN YOU GET INVOLVED?

1. By responding to our invitation for your involvement advertised in local newspapers.
2. By mailing or faxing a Comment and Registration Form to the CSIR (contact details provided below).
3. By telephonically contacting the CSIR if you have a query, comment, or require further project information.
4. By reviewing the various reports within the stipulated comment periods provided.
5. By attending any feedback meetings, which may be held during the review period.

CSIR Contact Details:

To register as an I&AP, please complete the Comment and Registration Form included with this BID and kindly return to:

Rohaida Abed
Email: RAbed@csir.co.za
Tel: 031 242 2300
Fax: 031 261 2509
Postal Address: P. O. Box 17001, Congella, Durban, 4013

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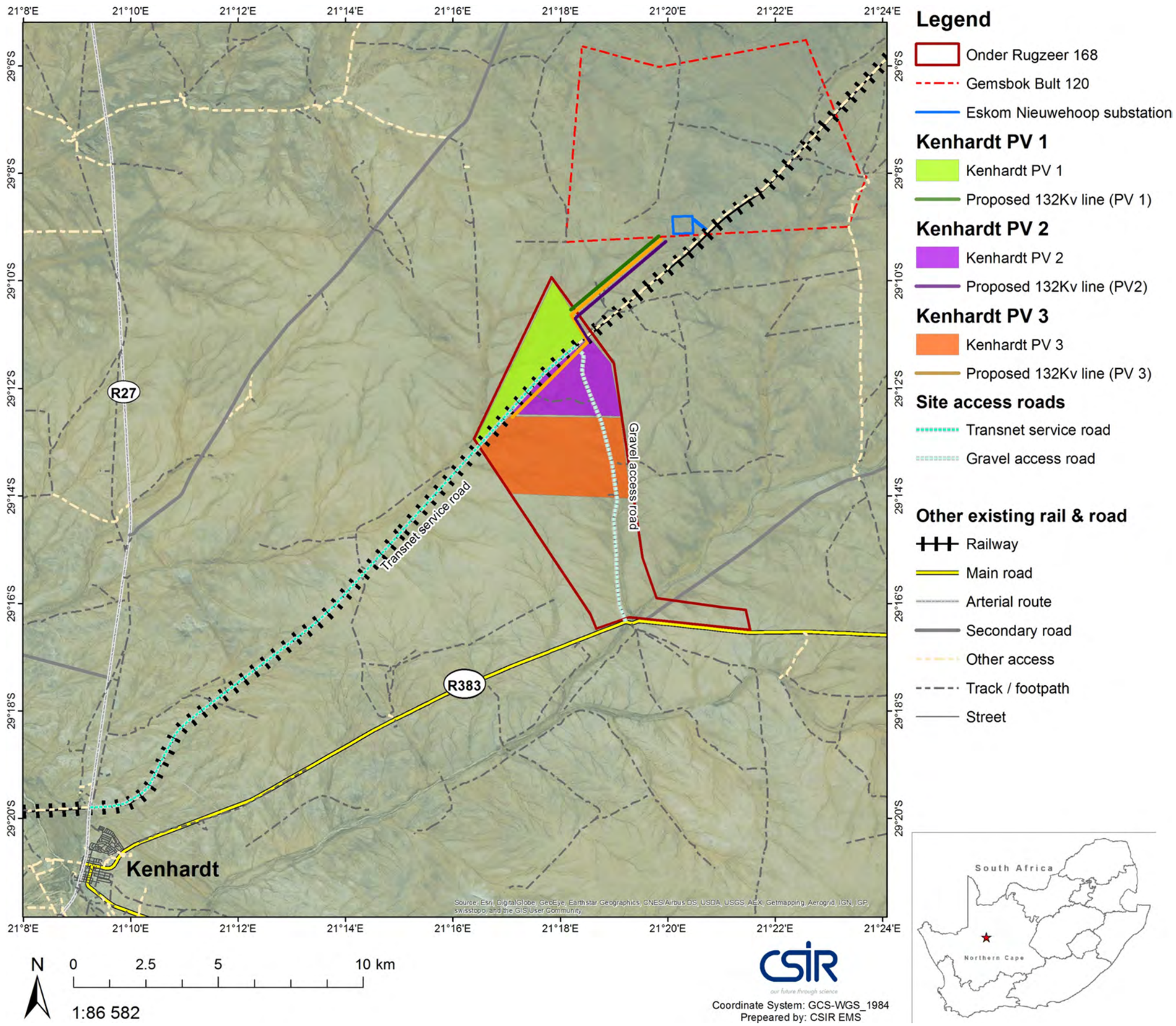

Figure 1 – Locality Map for the Proposed Project