



DRAFT BASIC ASSESSMENT REPORT

for

RE CAPITAL 2 SOLAR ENERGY FACILITY - ACCESS ROAD

on

PORTION 15 OF THE FARM KAMEELDOORN NO. 271
AND REMAINDER OF PORTION 5 OF THE FARM HAZIA
240, ZEERUST, RAMOTSHERE MOILOA LOCAL
MUNICIPALITY, NGAKA MODIRI DISTRICT
MUNICIPALITY IN THE NORTH WEST PROVINCE

-In terms of the

National Environmental Management Act (Act No. 107
of 1998, as amended) & 2014 Environmental Impact
Regulations

Prepared for Applicant: RE Capital 2 (Pty) Ltd

Date: 18 May 2017

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Report Reference: ZEE481/03

Department Reference: NWP/EIA/66/2016

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PURPOSE OF THIS REPORT:

Stakeholder Engagement

APPLICANT:

RE Capital 2 (Pty) Ltd

CAPE EAPRAC REFERENCE NO:

ZEE481/03

DEPARTMENT REFERENCE:

NWP/EIA/66/2016

SUBMISSION DATE

19 May 2017

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in terms of the
National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended &
Environmental Impact Regulations 2014

RE CAPITAL 2 SOLAR ENERGY FACILITY - ACCESS ROAD

**PORTION 15 OF THE FARM KAMEELDOORN NO. 271 AND REMAINDER OF PORTION
5 OF THE FARM HAZIA 240, ZEERUST, RAMOTHERE MOILOA LOCAL
MUNICIPALITY, NGAKA MODIRI DISTRICT MUNICIPALITY IN THE NORTH WEST
PROVINCE**

Submitted for:

Stakeholder Review & Comment

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ABBREVIATIONS

AIA	Archaeological Impact Assessment
BGIS	Biodiversity Geographic Information System
BID	Background Information Document
CBD	Central Business District
ACMP	Archaeological Conservation Management Plan
CDSM	Chief Directorate Surveys and Mapping
CEMP	Construction Environmental Management Plan
dBA	Decibel (measurement of sound)
DEA	Department of Environmental Affairs
DEA&DP	Department of Environmental Affairs and Development Planning
DEIR	Draft Environmental Impact Report
DME	Department of Minerals and Energy
DSR	Draft Scoping Report
FEIR	Final Environmental Impact Report
EAP	Environmental Impact Practitioner
EHS	Environmental, Health & Safety
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMP	Environmental Management Programme
GPS	Global Positioning System
GWh	Giga Watt hour
HIA	Heritage Impact Assessment
HWC	Heritage Western Cape
I&APs	Interested and Affected Parties
IDP	Integrated Development Plan
IFC	International Finance Corporation
IPP	Independent Power Producer
KNP	Karoo National Park
KOP	Key Observation Point
kV	Kilo Volt
$L_{Aeq,T}$	Time interval to which an equivalent continuous A-weighted sound level
LLRC	Low Level River Crossing
LUDS	Land Use Decision Support
LUPO	Land Use Planning Ordinance
MW	Mega Watt

NEMA	National Environmental Management Act
NEMAA	National Environmental Management Amendment Act
NEMBA	National Environmental Management: Biodiversity Act
NERSA	National Energy Regulator of South Africa
NHRA	National Heritage Resources Act
NID	Notice of Intent to Develop
NSBA	National Spatial Biodiversity Assessment
NWA	National Water Act
PIA	Paleontological Impact Assessment
PM	Post Meridiem; “Afternoon”
SACAA	South African Civil Aviation Authority
SAHRA	South African National Heritage Resources Agency
SANBI	South Africa National Biodiversity Institute
SANS	South Africa National Standards
SDF	Spatial Development Framework
SMME	Small, Medium and Micro Enterprise
SAPD	South Africa Police Department
TIA	Traffic Impact Assessment
VIA	Visual Impact Assessment

**SECTION 1:
BASIC ASSESSMENT
REPORT**



CHIEF DIRECTORATE: ENVIRONMENTAL SERVICES
DIRECTORATE: ENVIRONMENTAL QUALITY MANAGEMENT

(For official use only)

Provincial Reference Number:

NEAS Ref Number:

Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 and is meant to streamline applications.
2. This report format is current as of **December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
4. Where applicable **tick** the boxes that are applicable in the report.
5. The use of "not applicable" in the report must be done with circumspection. An incomplete report or that does not meet the requirements in terms of Regulation 19 of the NEMA EIA Regulations, 2014, will be rejected to be revised and be resubmitted.
6. The report must be handed in at offices of the relevant competent authority as determined by each authority.
7. No faxed or e-mailed reports will be accepted.
8. The signature of the Environmental Assessment Practitioner (EAP) on the report must be an original.
9. The report must be compiled by an independent EAP.

10. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
11. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
12. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
13. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
14. Shape files (.shp) for maps must be included on the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

1. PROJECT DESCRIPTION

- a) Describe the project in association with the listed activities applied for

The project entails the construction of a new access road to the RE Capital 2 Solar Energy Facility (a preferred bidder under the Renewable Energy Independent Power Producers Procurement Programme (REIPPP)). The facility and its grid connection have already been authorised.

The proposed access road will be a maximum of 10 m wide (including a 6m wearing course and 1m verge and 1m side drain on either side) and a maximum of 1km long and is being assessed as a corridor of 50 m wide. It will either be routed on Portion 15 of the Farm Kameeldoorn No. 271 or on Remainder of Portion 5 of the Farm Hazia No. 240 or a combination of both (depending on the alternative).

To date, the National Department of Environmental Affairs has been the competent authority on all the EIA applications for the RE Capital 2 Solar Energy Facility (PV Facility, Substation and Grid Connection as well as the expansion of the PV Facility). During the detailed design of the facility, the project developers have identified the need for a new access road (mostly entailing the expansion of an existing track). This proposed



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access road requires a basic assessment, as it entails the removal of more than 300 square metres of vegetation within a critical biodiversity area. Our understanding is that the North West Department of Rural, Environment and Agricultural Development will be the competent authority for this application.

The table below outlines the key development components and the listed activity for which they are associated.

Development Component	Listed Activity

Comment [LC1]: Is this not a duplication of (the table) below?

b) Provide a detailed description of the listed activities associated with the project as applied for

Indicate the number and date of the relevant notice	Activity No (s) and Activity Description (in terms of the relevant notice)	Describe each listed activity as per project description
GN 983, 4 December 2014	12. The development of- (xii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.	A portion of the proposed access road running along an existing track falls within 32m of the edge of a watercourse as delineated by a Freshwater Ecological Specialist.

Comment [LC2]: Pls provide application form for review that will be resubmitted with DBAR (a READ did not include all activities)

Comment [LC3]: Have these listed activities been updated as per the recent April amendments to the regulations?

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GN 983, 4 December 2014	28 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: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	The competent authority may view the solar facility as a commercial use, in which case, this activity would be applicable. We will obtain clarity on this during the pre-application meeting. <u>This activity relates to the approved 19 ha extension of the PV site and not the proposed access road. The impacts of this activity were already assessed in a previous, approved process (DEA ref. no. 14/12/16/3/3/1/1601, dated 16/10/16, as amended) however activity 28 was previously overlooked, hence this activity is included in this application.</u>
GN 983, 4 December 2014.	49 The expansion of (v) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; where such expansion or expansion and related operation occurs- (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse;	The existing road is to be widened, and a section of this widening occurs within 32m of the edge of a watercourse.
GN 985, 4 December 2014	4. The development of a road wider than 4 metres with a reserve less than 13,5 metres.	The existing access track that will be upgraded is situated within a Critical Biodiversity Area.

Comment [LC4]: DEA has said that it is applicable

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	<p>i. Outside urban areas, in:</p> <p>(ee) Critical biodiversity areas (Terrestrial Type 1 and 2) as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p>	
GN 985, 4 December 2014	<p>The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre.</p> <p>(e) In North West :</p> <p>i. Outside urban areas, in:</p> <p>(ee) Critical biodiversity areas (Terrestrial Type 1 and 2) as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;</p>	The existing access track that will be upgraded is situated within a Critical Biodiversity Area.
GN 985, 4 December 2014	<p>12. The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.</p> <p>(a) In Eastern Cape, Free State, Gauteng, Limpopo, North West and Western Cape provinces:</p> <p>ii. Within critical biodiversity areas identified in bioregional plans;</p>	The widening of the track will require the removal of vegetation and this removal of vegetation is situated within a critical biodiversity area.
GN 985, 4 December 2014	<p>14. The development of-</p> <p>(xii) infrastructure or structures with a physical footprint of 10 square metres or</p>	A portion of the proposed access road running along an existing track falls within 32m of the edge of a watercourse as delineated by a Freshwater

Comment [LC5]: In the North West

Comment [LC6]: What is the activity number?

Comment [LC7]: Include the expansion activity (23) as well

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	more; where such development occurs - (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;	Ecological Specialist. Add activities re 10m wide roads.
--	---	---

Comment [LC8]: Include the rest of this activity (ie the provinces)

Please note that any authorisation that may result from this application will only cover activities specifically applied for.

Province	North West Province
District Municipality	Ngaka Modiri Molema District Municipality,
Local Municipality	Ramotshere Moiloa Local Municipality
Ward Number(s)	15
Farm name and number	Farm Kameeldoorn No. 271 and Farm Hazia 240, Zeerust
Portion number	Portion 15 and Remainder of Portion 5
21 digit Surveyor General Code	T0JP0000000027100015 T0JP0000000024000005

Where a large number of properties are involved (e.g. linear activities) please attach a full list to this application including the same information as indicated above

2. FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;**
- (b) the type of activity to be undertaken;**
- (c) the design or layout of the activity;**

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- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application as required by EIA Regulation, 2014 Appendix 1(h) . Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed.

The determination of whether site or activity (including different processes, etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the, competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds using the Hartebeeshoek94 WGS84 co-ordinate system.

a) Site alternatives

Site Alternatives are not under consideration as part of this Basic Assessment Process, as the sole purpose of the access road is to access a Renewable Energy Power Generation facility which has already been authorised and selected as a preferred bidder. For the purposes of this Basic Assessment Report, Layout / Alignment Alternatives will be considered.

List alternative sites, if applicable.

Site Alternatives	Description
Alternative Site 1 (preferred or	

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only site alternative)	
Alternative Site 2	
Alternative Site 3	

Site Co-ordinates

Latitude (S):

Longitude (E):

Alternative S1 (preferred or only site alternative)

Alternative S2 (if any)

Alternative S3 (if any)

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"

In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred or only route alternative)

Starting point of the activity

Middle/Additional point of the activity

End point of the activity

Alternative S2 (if any)

Starting point of the activity

Middle/Additional point of the activity

End point of the activity

Alternative S3 (if any)

Starting point of the activity

Middle/Additional point of the activity

End point of the activity

°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"
°	'	"	°	'	"
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°	'	"	°	'	"

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 metres along the route for each alternative alignment.


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In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A.

b) Lay-out alternatives

Alternatives	Description
<p>Alternative 1 (preferred or only alternative)</p>	<p>The preferred alternative is to upgrade and utilise the existing farm access that starts at the end of Furguson Street (at the intersection between Furguson and Rois St).</p> <p>From the end of Furguson Street, the proposed access road will follow the existing farm access track over <u>Remainder of</u> Portion 5 of the Farm Hazia 240 into Portion 15 of The Farm Kameeldoorn No. 271 via the existing farm gate. It will then run along the Eastern boundary of Portion 15 of The Farm Kameeldoorn No. 271 to within the authorised footprint of the proposed development.</p>  <p>Figure 1: Alternative 1 Access road alignment</p> <p>It must be noted, that the alignment reflected in the figure above shows the existing access roads intended to be upgraded for the purpose of accessing the facility. This Basic assessment report will however consider and assess a <u>50m</u> wide access <u>corridors</u> along this alignment to allow for minor deviations that may come as a result of detailed design.</p> <p>Alternative 1 is approximately 880m long.</p>


Comment [LC9]: Please make sure your map (in annexures) shows a corridor else it doesn't seem like a corridor was assessed

Comment [LC10]: Could you provide kmz's of the corridors please?

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	<p>Please refer to the Site Layout Plans in Appendix B showing the layout plans and assessment corridors.</p>
<p>Alternative 2</p>	<p>Alternative 2 access road also starts at the end of Furguson road (at the intersection between Furguson and Rois St). It then utilises Rois Street in a Southerly direction to the intersection of Rois and Reitz Street. From this intersection, it follows an existing gravel track on <u>Remainder of</u> Portion 5 of the Farm Hazia 240 (along the western boundary) and enters Portion 15 of The Farm Kameeldoorn No. 271 within the authorised footprint.</p>  <p>Figure 2: Alternative 2 Access Road Alignment</p> <p>It must be noted, that the alignment reflected in the figure above shows the existing access roads intended to be upgraded for the purpose of accessing the facility. This Basic assessment report will however consider and assess a 50m wide access corridors along this alignment to allow for minor deviations that may come as a result of detailed design.</p> <p>Alternative 2 is approximately 820m Long</p> <p>Please refer to the Site Layout Plans in Appendix B showing the layout plans and assessment corridors.</p>

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Comment [LC11]: Please do a search for Portion 5 references and add 'Remainder of' in front of it

<p>Alternative 3</p>	<p>Alternative 3 access road starts at the end of Kop Street (at the intersection of Kop and Spruit Street.) From this intersection, it follows an existing gravel track on <u>Remainder of</u> Portion 5 of the Farm Hazia 240 and enters Portion 15 of The Farm Kameeldoorn No. 271 within the authorised footprint.</p>  <p>Figure 3: Alternative 3 Road Alignment</p> <p>It must be noted, that the alignment reflected in the figure above shows the existing access roads intended to be upgraded for the purpose of accessing the facility. This Basic assessment report will however consider and assess a 50m wide access corridors along this alignment to allow for minor deviations that may come as a result of detailed design.</p> <p>Alternative 3 is approximately 730m long.</p> <p>Please refer to the Site Layout Plans in Appendix B showing the layout plans and assessment corridors.</p>
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c) Technology alternatives

Alternatives	Description
<p>Alternative 1 (preferred or only <u>technology</u> alternative)</p>	<p>The road will consist of the following:</p> <ul style="list-style-type: none"> • driving surface (Crowned),

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	<ul style="list-style-type: none"> • shoulder area that slopes directly away from the edge of the driving surface, and • stormwater furrow. The extent of the stormwater management system, if any, is at the discretion of the design engineer depending on the erosive quality of the soil. <p>The intention at this stage is for the access road to remain with a gravel wearing course – this environmental process however does not exclude the option of surfacing the road at a later stage in the future.</p>
Alternative 2	
Alternative 3	

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternatives	Description
Alternative 1 (preferred or only alternative)	
Alternative 2	
Alternative 3	

e) No-go alternative

The no go alternative will entail the construction of the access road as assessed and authorised for the main facility and depicted below:

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Figure 4: Authorised Access Road

The authorised access road follows an existing gravel track from the Jacobsdal road and enters the Authorised PV footprint in the South Eastern Corner.

As described above, ~~the~~ authorised road is aligned under 3 high voltage cables and during this detailed design phase Eskom have refused consent for the project to obtain access underneath these powerlines. The no go alternative is thus at this stage no longer feasible but will be used as a baseline against which impacts will be assessed.

f) Please motivate for preferred site, activity and technology alternative

Alternative 1 is the preferred option for the proposed access road based on the following findings:

1. Same landowner

Over ninety percent of the authorised footprint is on the Kameeldoorn Property. The Project Company has an existing relationship and lease option agreement in place with this landowner. The Project Company is in the process of finalising the notarial deed of lease with the landowner and thus negotiating to construct the access road on this land is easier than trying to negotiate an agreement with a new landowner. In addition, part of this

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road is frequently used by the current landowner.

2. Permits in place

The entire Kameeldoorn Property has already been entirely rezoned for business use, in order to allow for the PV facility. Constructing the access road on the Kameeldoorn Property prevents the commencement of a new rezoning process to rezone another piece of land, which is a time-intensive process.

Other permits and approvals have also already been obtained for the entire Kameeldoorn Property, including but not limited to:

- Section 53 Approval from the Department of Mineral Resources
- Approval from the Civil Aviation Authority
- Confirmation of no land claims from the Regional Land Claims Commission

3. Vegetation clearing

The impact of the widening will be minimal; there is a grass verge for most of the route and the removal of woody species will be very limited. None of the species that will be removed are protected.

4. Proximity to the Security and O&M as per the approved Site Development Plan

The most suitable location for the access road will be to arrive at the facility at the security checkpoint.

Paragraphs 3 – 13 below should be completed for each alternative.

~~3. PHYSICAL SIZE OF THE ACTIVITY~~

3. PHYSICAL SIZE OF THE ACTIVITY

- a) Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):



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Alternative:
Alternative A1¹ (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the ~~activity~~activity:

m
m ²
m ²

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Length of the activity:

880m
820m
730m

b) Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Size of the site/servitude:

8800m ² <i>(within a corridor of 44 000m²)</i>
8200m ² <i>(within a corridor of 41 000m²)</i>
7300m ² <i>(within a corridor of 36 500m²)</i>

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4. SITE ACCESS
4. SITE ACCESS

Does ready access to the site exist?

✓YES	NO
m	

If NO, what is the distance over which a new access road will be built

Describe the type of access road planned:

This environmental process is solely for an access road to an existing approved facility. All three access roads under consideration are accessible directly from the existing road network of Zeerust and are existing roads. It would be necessary to expand the final route to a width of up to 10 m. The details of the three alternative access roads are described in section 2 above.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

Please refer to the site layout plans attached in Appendix B which show the various access road options in proximity to the authorised PV site.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s);
- the accurate indication of the site in relation to closest protected environments or national parks (i.e. within 2.5 km)
- road access from all major roads in the area;



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- for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas and ecological support area.
- protected areas (e.g Magaliesberg Protected Environment, Pilanesberg National Park etc.)

The sensitivity map must also cover areas within 100m of the site and must be part of Appendix B.

Appendix D contains all the relevant Biodiversity overlays, including:

- Freshwater Ecosystems;
- Vegetation Types;
- Critical Biodiversity Areas;

No other sensitive areas were identified.

Comment [LC12]: I assume, as you have not noted them above

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8. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix C to this report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

The site photographs are attached in Appendix C. Since the activity is linear in Nature, the photographs are taken sequentially along the route alternatives and not from the centre of the site.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 1:200 as Appendix D for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

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Since the activity does not entail the construction of physical structures, Facility illustrations are not included. The route alignments are indicated in Appendix B and typical cross sections are included in the Engineering Method Statement in Appendix J1 and below.

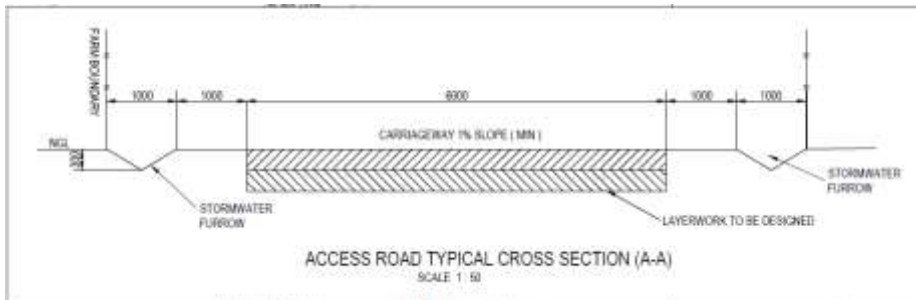


Figure 5: Typical Cross section of proposed access road.

10. ACTIVITY MOTIVATION

Motivate and explain the need and desirability of the activity (including demand for the activity):

Is the activity permitted in terms of the property's existing land use rights?	✓YES	NO	Please explain
The proposed activity entails the upgrading and widening of existing roads and as such does not change the land use of the properties in question.			
Will the activity be in line with the following?			
(a) Provincial Spatial Development Framework (PSDF)	✓YES	NO	Please explain

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According to the North West Province Provincial Development Plan 2030, Renewable energies, especially solar and waste/biomass to energy initiatives will play an increasingly important role in the following two decades and will contribute a much greater share of provincial energy consumption.

In terms of Electricity infrastructure related to forms of renewable energy, the spatial distribution of supply should aim to follow clearly defined corridors, with electricity services being highly concentrated close to the major routes and high capacity electricity infrastructure (PSDF, 2011). This project for which these access roads are proposed aims to link to existing and approved electrical infrastructure associated with renewable energy project (Solar PV Development) and the Eskom national grid network (via the Zeerust substation).

One of the sustainable development objectives of the PSDF is to utilize renewable resources as opposed to non-renewable resources. This access road is associated with the generation of electricity from a renewable resource. It also promotes the concept of Bioregionalism as enshrined in the PSDF.

(b) Urban edge / Edge of Built environment for the area	✓YES	NO	Please explain
---	------	----	----------------

Portions of the proposed access roads are outside of the Urban Edge of Zeerust, however, the nature of such access roads dictates that they need not be situated within an urban edge or within the edge of built up areas.

(c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).	✓YES	NO	Please explain
--	------	----	----------------

The IDP defines public infrastructure development such as energy generation as a critical action within the municipal area. This proposed access road is directly linked to the authorised power generation facility.

(d) Approved Structure Plan of the Municipality	✓YES	NO	Please explain
---	------	----	----------------

To the best of our knowledge, there is no specific structure plan adopted for the Gamagara local municipality. The project is however compliant with other relevant planning policies.

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	✓YES	NO	Please explain
---	------	----	----------------

There are no specific Environmental Management Frameworks for the Gamagara Municipal area. The North West Province Environmental Implementation Plan, 2015, encourages renewable or non-consumptive use of natural and heritage resources through pro-active planning as a key performance target.



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(f) Any other Plans (e.g. Guide Plan)	✓YES	NO	Please explain
To the best of our knowledge, there is no specific guide plan adopted for the Gamagara local municipality. The project is however compliant with other relevant planning policies.			
Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	✓YES	NO	Please explain
The spatial development framework defines the renewable energy sector as a focus area for this municipal district.			
Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	✓YES	NO	Please explain
<p>This proposed access road is related to a renewable energy project that has been selected as a preferred bidder under the Department of Energy's Renewable Energy Independent Power Producers procurement programme.</p> <p>Given the context of PV farm developments in the local context, this proposed access road can be considered to be in-line / associated with the local investment already placed in this emerging renewable energy landscape. Care has been taken to avoid impacting on the agricultural land-use in the area, as well as the scenic / cultural landscape, by aligning the access road on existing farm tracks.</p> <p>On a strategic level, the proposed access road aligns with the regional, national and international need for the distribution of 'green electricity' from renewable energy.</p>			
Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix E.)	✓YES	NO	Please explain
This activity is considered in support of a primary service, i.e. the provision of electricity. No additional services are required to support the activity.			

Comment [LC13]: What about landfill capacity for waste? You could note that there was capacity sufficient for the solar farm and waste from the access road was included in that

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Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	✓YES	NO	Please explain
Not Applicable. The activity in itself is an infrastructure development			
Is this project part of a national programme to address an issue of national concern or importance?	✓YES	NO	Please explain
The generation of 'green / clean electricity' from a renewable energy resource (Solar) forms part of a national programme to reduce reliance of coal-powered generation of electricity. The proposed access road will serve to a facility that will be generating electricity from a renewable source and will thus support this notion. Securing renewable energy sources into the overall energy matrix has been highlighted as a priority by the Department of Energy. The Renewable Energy Independent Power Producers Procurement Programme was established as a result of this. This access road is associated with a project that has been selected as a preferred bidder in terms of this programme.			
Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	✓YES	NO	Please explain
This proposed access road will provide access to a renewable energy facility that has already been authorised and has been selected as a preferred bidder in terms of the REIPPP. This facility will be generating 75MW of electricity for inclusion into the National Grid. The proposed access road utilises existing farm tracks and as such is situated along existing landscape divides so as to avoid impacting on the agricultural landuse and ecological sensitive areas.			
Is the development the best practicable environmental option for this land/site?	✓YES	NO	Please explain
The approved PV facility needs to acquire access. Utilising existing farm tracks for this purpose is deemed to be the option of least impact.			
Will the benefits of the proposed land use/development outweigh the negative impacts of it?	✓YES	NO	Please explain

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The potential negative impacts associated with the preferred access road alignment were found to be to low (with mitigation), and thus acceptable, given the context. Aside from the employments benefits associated with the construction and operation / maintenance of the road, the benefit of allowing the input of 'clean electricity' into the national grid is considerable.			
Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	✓NO	Please explain
A PV facility has been approved for development in this area, which will all require access. The approved PV facility and the availability of land, and not this access road will set the precedent as to whether there will be further such developments in the area.. Considering the manner in which the access road has been designed to avoid impacting on the landuse and sensitive features (environmental and heritage/cultural) in the landscape, it can be argued that it will set a positive precedent for any future access roads in the area (Should further PV development ever take place)			
Will any person's rights be negatively affected by the proposed activity/ies?	YES	✓NO	Please explain
As mentioned above, the preferred access road alternative has been aligned / designed to have the least possible impact on existing landuse as it has been aligned along utilising existing tracks as far as possible. Furthermore, a detailed public participation process took place as part of the EIA (for the facility). No major concerns nor objections were raised in this environmental process. An additional public participation process has taken part as part of this application.			
Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	✓NO	Please explain
Although falling outside of the developed areas of Zeerust, as a linear activity, the proposed access road will not compromise the urban edges of the Ramotshere Moiloa Municipality.			
Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	✓YES	NO	Please explain

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The energy project as a whole is deemed to form part of 3 separate Strategic Infrastructure Projects (SIP), namely:

SIP 8: Support sustainable green energy initiatives on a national scale through a diverse range of clean energy options as envisaged in the IPR2010

The distribution of electricity generated from renewable resource (solar) by the preferred bidders that will connect to the national grid via this powerline.

SIP 9: Electricity Generation to support socio-economic development

The distribution of electricity generated from renewable resource (Solar) by the by the preferred bidders that will connect to the national grid.

SIP 10: Electricity Transmission and Distribution for all.

As the proposed access road is associated with renewable energy projects (preferred bidders) under the Independent Power Producer (IPP) Procurement Programme, it can be considered as a Strategically Important Development ("SID"), due to their potentially significant contribution to the regional and national economy.

The coordinator for SIP8 has confirmed that the greater project (for which this access road is directly linked) does indeed fall within the ambit of SIP8.

What will the benefits be to society in general and to the local communities?

Please explain

Addition of much needed electricity into the national grid.

This project will allow the construction of the Solar Development which will distribute 75mw of "clean-electricity" generated by the Solar Development from a renewable resource (solar) into the national electrical grid, which is currently under enormous pressure. The national grid currently relies heavily of coal for electricity generation, which has associated pollution and climate-change repercussions, thus this project indirectly contributes to minimising these impacts through its associated with renewable energy generation.

Any other need and desirability considerations related to the proposed activity?

Please explain

The studies undertaken as part of this environmental process, as well as those associated with the solar facility, contribute to a greater understanding of the landscape and context and the sensitive elements within it (e.g. remnant natural vegetation and watercourses, cultural heritage areas, archaeological and palaeontological resources, avifaunal species and populations etc.), as well as the protection and rehabilitation of these elements (e.g. implementation of buffers, removal and monitoring of alien vegetation etc.).

How does the project fit into the National Development Plan for 2030?

Please explain

Comment [LC14]: Do you have a pers. Comm Reference for this?

Comment [LC15]: Not any more according to Eskom

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Contribution to the provision of electricity to the nation, and investment in electrical infrastructure for its distribution (as part of the strategy to remedy the electricity crisis of 2008 and that associated with the future demands).

This access road is part of a project that aligns with the one of the prioritised infrastructure investments listed in the NDP: "Procuring at least 20 000MW of renewable electricity by 2030, importing electricity from the region, decommissioning 11 000MW of ageing coal-fired power stations and stepping up investments in energy-efficiency", as well as one the key proposals to "Implement the 2010 Integrated Resource Plan (procuring at least 20 000MW of electricity from renewables) to reduce carbon emissions from the electricity industry from 0.9kg per kilowatt-hour to 0.6kg per kilowatt-hour.

Please describe how the general objectives of Integrated Environmental Management as set out in Section 23 of NEMA as amended have been taken into account.

The investigation, assessment and communication of potential impacts of this proposal on the receiving environment have considered alternatives (the no-go) and cumulative impacts, and recommended mitigation and monitoring measures to ensure that potential negative impacts are kept to a minimum and potential positive impacts are enhanced. Among these is the recommendation for on-going monitoring of the access tracks to avoid erosion and removal alien plants.

Please describe how the principles of environmental management as set out in Section 2 of NEMA as amended have been taken into account.

It is argued that the proposed development of this access road as part of the greater project will be socially, environmentally and economically sustainable, due to the following:

Further disturbance to the local ecosystems / loss of biodiversity is likely to be negligible as the access road, will be positioned along / on existing transformed / disturbed areas in the landscape i.e. the access road will align along existing farm tracks.

Mitigation and monitoring measures have been recommended to minimise and avoid potential degradation of the environment, as well as rehabilitate the current disturbed context where possible.

11. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES



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List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline	Applicability to the project	Administering authority	Date
National Environmental Management Act.	Basic Assessment	Department of Environmental Affairs	Act 107 of 1998 as amended
National Environmental Management: Biodiversity Act.	Endangered / Vulnerable vegetation types and Protected Species (TOPS)	READ	Act 10 of 2004
National Spatial Biodiversity Assessment	Critical Biodiversity Areas & Ecological Support Areas across alignment	READ	2011
Conservation of Agricultural Resources Act	Agricultural land traversed by powerline. Alien vegetation in and surrounding site	Department of Agriculture, Forestry & Fisheries	Act 43 of 1983
National Veld and Forest Fire Act	Alien infested Thicket and Fynbos in relation to fire risk.	Department of Agriculture, Forestry & Fisheries	Act 101 of 1998
National Heritage Resources Act	Activity on site greater than 5000m ² in extent.	SAHRA	Act 25 of 1999

Comment [LC16]: What about NWA for crossing in drainage line buffer?

Comment [LC17]: But we are looking at the r only- does this still apply?

Comment [LC18]: There is no fynbos on site. I don't remember there being many aliens. Please double check this

Comment [LC19]: This should be the linear activity- I think over 500 m in length. Please check

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

If YES, what estimated quantity will be produced per month?

YES	<input checked="" type="checkbox"/> NO
m ³	

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How will the construction solid waste be disposed of (describe)?

Construction waste will not be generated as a result of this activity.

Comment [LC20]: There would be some but a minimal amount. Especially cleared vegetation. This would already be included in the PV site though so no additional waste to that already approved would be generated

Where will the construction solid waste be disposed of (describe)?

Construction waste will not be generated as a result of this activity.

Comment [LC21]: As above

Will the activity produce solid waste during its operational phase?

YES NO

If YES, what estimated quantity will be produced per month?

0m³

How will the solid waste be disposed of (describe)?

Operational waste will not be generated as a result of this activity.

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

Operational waste will not be generated as a result of this activity.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

Operational waste will not be generated as a result of this activity.

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?

YES NO

If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES NO

If YES, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES NO

If YES, what estimated quantity will be produced per month?

0m³

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Will the activity produce any effluent that will be treated and/or disposed of on site?

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

If YES, describe the type of effluent and the disposal mechanism/method

The activity will not produce effluent during construction nor operational phases.
--

Will the activity produce effluent that will be treated and/or disposed of at another facility?

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

If YES, provide the particulars of the facility:

Facility name:			
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

The activity will not generate, nor utilise wastewater.

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other than exhaust emissions and dust associated with construction phase activities?

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

If YES, is it controlled by any legislation of any sphere of government?

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

If YES, the applicant must consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the emissions in terms of type and concentration:

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The applicant will be responsible for ensuring compliance with the National Dust Control Regulations (Regulation 827). According to the regulations, any person conducting any activity in such a way as to give rise to dust in quantities and concentrations that exceeded the dustfall standard set out in the regulation was are, upon receipt of a notice from an air quality officer, impelled to, upon receipt of a notice from an air quality officer, implement a dustfall monitoring programme.

d) Waste Licence/Registration

Will any aspect of the activity produce waste that will require a waste licence/registration in terms of the NEM:WA?

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

If YES, please submit evidence that an application for a waste licence/registration has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

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

If YES, is it controlled by any legislation of any sphere of government?

If YES, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If NO, describe the noise in terms of type and level:

Noise generated by the activity will be limited to noise generated by construction machinery during the construction phase and noise levels will comply with SANS 10103:2008.- The impact of this is deemed to be very low, with mitigation as outlined in the EMPr.

13. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es):

<input checked="" type="checkbox"/> Municipal	Water board	<input checked="" type="checkbox"/> Groundwater	River, stream, dam or lake	Other	<input checked="" type="checkbox"/> The activity will not use water
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If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

Up to 953 m ³ per month for the entire solar development litres	
<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> NO

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Does the activity require a water use authorisation (general authorisation or water use license) from the Department of Water and Sanitation?

If YES, please provide proof that the application has been submitted to the Department of Water and Sanitation.

The access road construction would form a small component of the general solar development construction which would require approximately 953m³ per month of water. This water would be procured by the Engineer Procure Contract (EPC) Contractor appointed to construct the project and would be sourced either from the municipality or from groundwater. The Municipality has committed to provide all of the water requirements from its reservoir for the solar development (directly next to site shown on site plan)(see appendix xxx).

Comment [LC22]: Please include this. You can find it in Annexure E, Appendix 13 of the FEIR for the main site

Abstraction of groundwater to a maximum of 75m³/ha/a is allowed via General Authorisation in the affected catchment. Since it would be necessary to abstract less than 75m³/ha/a any proposed borehole use will be authorised under General Authorization should this option be pursued.

The preferred alternative passes within 7 m of a drainage line (at the closest point) for a length of 80 m and Alternative 2 passes with 30 m of the same drainage line (at the closest point) for a length of 10m. The current information provided by participating specialists indicates that the activity will not require a water use licence as the drainage line is undefined at this location (in the headwaters) and any associated floodline would be confined to its channel.- The Department of Water and Sanitation have been requested to provide confirmation in this regard and will be given a further opportunity to comment on this Basic Assessment Report.

Comment [LC23]: Could you ask someone who does WUL/GA application as well as I doubt DWWS will respond in this time period.

14. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

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None – The activity is of such a nature that it does not utilise energy. It is however associated with a facility that will generate energy from a renewable resource.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

None - The activity is of such a nature that it does not utilise energy. It is however associated with a facility that will generate energy from an alternative resource.

Has a specialist been consulted to assist with the completion of this section?

YES

NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix F.

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SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area, as it appears on the Site Plan.

Paragraphs 1 - 6 below must be completed for each alternative.

Current land-use zoning as per local municipality IDP/records:

Remainder of Portion 5 of the Farm Hazia 240 is zoned for Agricultural use, while Portion 15 of The Farm Kameeldoorn No. 271 is zoned for Business use. The proof of these zonings is included in Annexure J1.

In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application.

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

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

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> 1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2 (if any):

<input checked="" type="checkbox"/> Flat	<input checked="" type="checkbox"/> 1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S3 (if any):



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✓ Flat	✓ 1:50 – 1:20	✓ 1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
--------	---------------	---------------	-------------	--------------	-------------	------------------

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline	<input type="checkbox"/>	2.4 Closed valley	<input type="checkbox"/>	2.7 Undulating plain / low hills	<input type="checkbox"/>
2.2 Plateau	<input type="checkbox"/>	2.5 Open valley	<input type="checkbox"/>	2.8 Dune	<input type="checkbox"/>
2.3 Side slope of hill/mountain	<input type="checkbox"/>	2.6 Plain	<input checked="" type="checkbox"/>	2.9 Seafront	<input type="checkbox"/>

Comment [LC24]: there is also the hill that the reservoir is on

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following?

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	YES	✓NO	YES	✓NO	YES	✓NO
Dolomite, sinkhole or doline areas	YES	✓NO	YES	✓NO	YES	✓NO
Seasonally wet soils (often close to water bodies)	YES	✓NO	YES	✓NO	YES	✓NO
Unstable rocky slopes or steep slopes with loose soil	YES	✓NO	YES	✓NO	YES	✓NO
Dispersive soils (soils that dissolve in water)	YES	✓NO	YES	✓NO	YES	✓NO
Soils with high clay content (clay fraction more than 40%)	YES	✓NO	YES	✓NO	YES	✓NO
Any other unstable soil or geological feature	YES	✓NO	YES	✓NO	YES	✓NO

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An area sensitive to erosion

YES	✓NO
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YES	✓NO
-----	-----

YES	✓NO
-----	-----

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted.

An Agricultural Specialist, Mr Johann Lanz, undertook an Agricultural Impact Assessment of the proposed PV Generation facility as part of the preceding EIA. This specialist confirmed the following in respect of the Geology and Soils on site:

The geology of the site is quartzite of the Transvaal Supergroup.

The land type classification is a nation-wide survey that groups areas of similar soil and terrain conditions into different land types. All land type data on soils and agricultural potential in this report has been obtained from the online Agricultural Geo-Referenced Information System (AGIS) (Agricultural Research Council, undated). There is a single land type across the site and surrounding area, namely Ae34. The soils of this land type are predominantly shallow to deep, well drained, red, non-structured, loamy-sand soils on underlying rock. In the landscape position of the site, across the top of hills, the soils are dominated by very shallow soils of the Mispah soil form. Deeper soils occur on the flatter or concave land between ridges. The field investigation confirmed the dominance of very shallow Mispah soils with interspersed, deeper, predominantly Hutton soils.

4. GROUNDCOVER

Indicate the types of groundcover present on the site. The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

A Botanical specialist undertook studies for 3 previous EIA's (Namely, the main facility, grid connection and expansion area) and provided an impact statement for this proposed access road from which the following was determined.

Natural veld - good condition ^E	✓ Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E	Veld dominated by alien species ^E	Gardens
--	---	--	--	---------

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Sport field	Cultivated land	✓Paved surface	Building or other structure	✓Bare soil
-------------	-----------------	----------------	-----------------------------	------------

If any of the boxes marked with an "E" is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	✓NO	UNSURE
Non-Perennial River	✓YES	NO	UNSURE
Permanent Wetland	YES	✓NO	UNSURE
Seasonal Wetland	YES	✓NO	UNSURE
Artificial Wetland	YES	✓NO	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

A hydrology specialist was appointed to provide input into this environmental process with respect to the proximity of the road to a non-perennial watercourse. The following is summarised from this specialist's findings:

The non-perennial watercourse is only in proximity to Alternative 1 (the preferred route), and Alternative 2 as this alignment was found to intersect with a 32 m buffer of a drainage line.

Ordinarily, when infrastructure is proposed within that proximity of a water course, there is a requirement for a 1:100 year return period floodline study to be undertaken. However, based on the specialist's assessment of the location of the drainage line in relation to the proposed road alignment, it is their opinion that a floodline

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study would not be required.

The reason for this is that the buffer area of the drainage line intersecting with the proposed road alignment is located at the headwaters, or uppermost section of the drainage line (i.e. the start of where overland flow combines to form a defined flow). The portion of road intersecting with the buffer area does not appear to be intersecting with a defined drainage line, but rather an area in which flow is characterised by overland flow at the top of a catchment area. The delineation of a floodline would therefore be largely inconclusive, especially if detailed (0.5 m interval or less) contour information is not used. Further, the delineated drainage line has not formed at this point and, where it has formed, it is unlikely to have a floodline much greater than the defined channel width, due to its very limited contributing catchment area at this point.

To summarise, the drainage line is undefined where it is near to the road alternatives and, in the unlikelihood that it has an associated floodline the floodline is confined to the drainage line channel. Provided that sufficient stormwater controls within the road allow for continued overland flow of water towards the drainage line the drainage line will not be affected by the widening of the road. The specialist has Thus, it is very unlikely to be any flood risk to the road from Access Road Option 1, assuming a suitably sized culvert is in place to account for the accumulated overland flow.

Based on this, it is concluded that a floodline of the drainage line identified would not provide value to the project. It was noted that a culvert would be placed in the vicinity of the drainage line so that overland flow in this area would cross the proposed road alignment in a controlled manner. It is therefore, recommended that a culvert is included in the road design as previously indicated.

Comment [LC25]: I think we should recommend that the widening of the road in this location is on the opposite side of the existing road to the drainage line so that potential impacts on the drainage line are minimized.

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

✓ Natural area	✓ Dam or reservoir	Polo fields
✓ Low density residential	Hospital/medical centre	Filling station ^H
✓ Medium density residential	School	Landfill or waste treatment site

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High density residential	Tertiary education facility	Plantation
✓ Informal residential ^A	Church	✓ Agriculture
Retail commercial & warehousing	Old age home	✓ River, stream or wetland ^N
Light industrial	Sewage treatment plant ^A	Nature conservation area ^N
Medium industrial ^{AN}	Train station or shunting yard ^N	Mountain, koppie or ridge ^N
Heavy industrial ^{AN}	✓ Railway line ^N	Museum
✓ Power station	Major road (4 lanes or more) ^N	Historical building ^N
Office/consulting room	Airport ^N	Protected Area ^N
Military or police base/station/compound	Harbour	Graveyard ^N
Spoil heap or slimes dam ^A	Sport facilities	✓ Archaeological site ^N
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

Comment [LC26]: Is the reservoir hill not a koppie?

Comment [LC27]: The solar facility hasn't been built yet

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If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain

Archaeological Site

The Archaeology specialist identified a number of Archaeology sites (13) on the property and surrounding areas as per the Diagram below.

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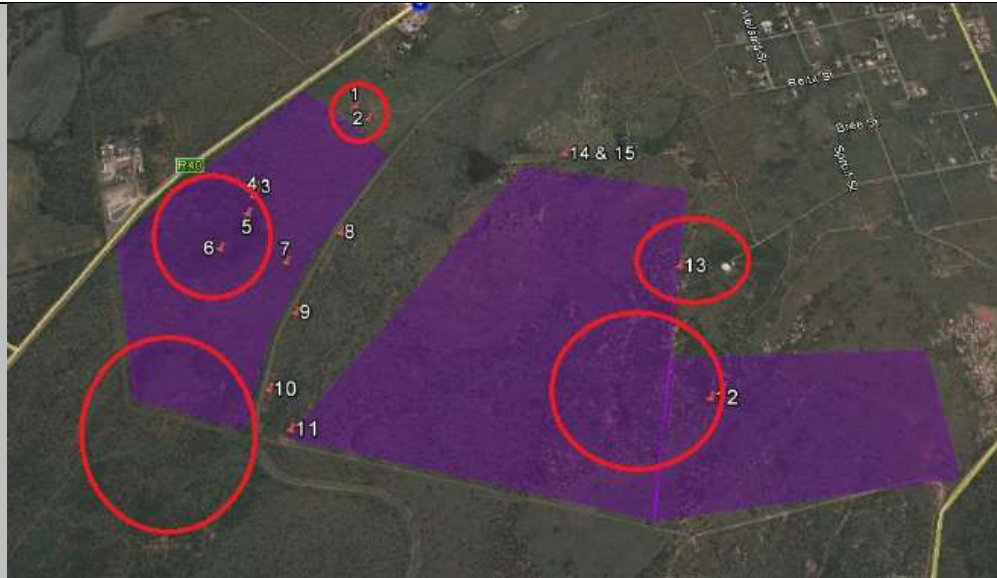


Figure 6: Showing Archaeology sites in the vicinity of the proposed activity. In this diagram, the Purple polygons show the original extent of the study area, while the red circles indicate the koppies that may have been subject to early human activity.

Of all the identified archaeological sites, only site 13 is in proximity to any of the proposed alternatives, namely the proposed access road alternative 1 – Preferred.

Site 13 dates to the Late Iron Age and contains stone walled features such as livestock enclosures and hut bays. This site is situated fairly close to the water reservoir in the area and hasvehave to some extent been impacted on already during the construction of the reservoir and the cell tower next to it.

Regardless of the above, the proposed access road – Alternative 1, has been specifically aligned outside away from of the rocky outcrop where archaeological site 13 is situated to avoid impacting on this site.

Railway Line

The proposed Access road alternativesalternative will not impact on the railway line in any way. Please refer to the image below that shows the access road alternatives in relation to the existing railway line.

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Figure 7: Showing the proximity of the existing railway line to the proposed access road alignments.

River / Stream or Wetland.

All three access road alternatives are situated outside of the delineated water courses and their associated floodlines. These watercourses were delineated by a Freshwater Specialist, Dr Brian Colotty.

Access Road Alternative 1 does extend into the 32m buffer area of one of the delineated water courses. The impact of the access road on the watercourse is deemed to be low as the buffer area of the drainage line intersecting with the proposed road alignment is located at the headwaters, or uppermost section of the drainage line (i.e. the start of where overland flow combines to form a defined flow). The portion of road intersecting with the buffer area does not intersect with a defined drainage line or floodline, but rather an area in which flow is characterised by overland flow at the top of a catchment area.

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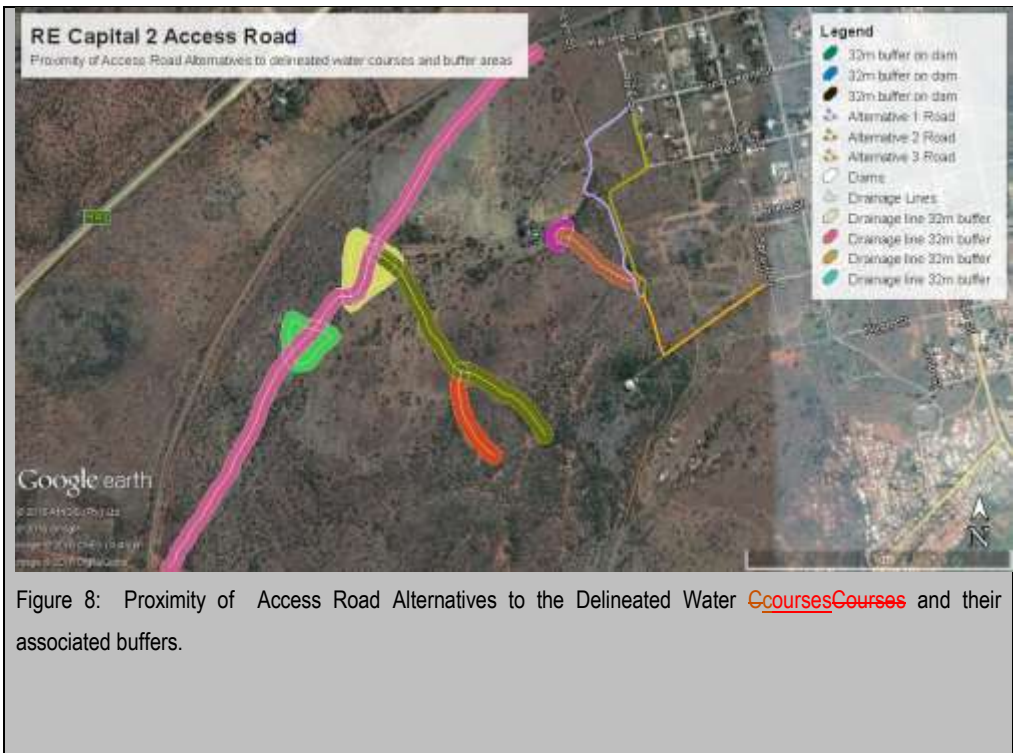


Figure 8: Proximity of Access Road Alternatives to the Delineated Water Courses and their associated buffers.

If any of the boxes marked with an "AN" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

None

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

None

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	✓YES	NO
Core area of a protected area?	YES	✓NO
Buffer area of a protected area?	YES	✓NO

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Planned expansion area of an existing protected area?	YES	✓NO
Existing offset area associated with a previous Environmental Authorisation?	YES	✓NO

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix B (as part of sensitivity map).

All three road alignments fall within a Critical Biodiversity Area identified in the North West Biodiversity Sector Plan. The Biodiversity Specialist, Prof George Bredenkamp however confirmed the following:

The GIS derived, coarse scale Critical Terrestrial Biodiversity areas map considered the area of the Moot Plains Bushveld as a CBA1. Considering the results of the study, it is clear that the CBA1 status should only be applied to the eastern part (Pretoria-Hartebeespoort Dam-Rustenburg area) of the Moot Plains Bushveld, where biodiversity is indeed threatened. This should not be applied to the western parts from Rustenburg to Zeerust.

A series of plans showing the Critical Biodiversity areas in relation to the Proposed Access Road Alternatives is included in Appendix B.

7. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult <http://bgis.sanbi.org> or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix B to this report.

- a) **Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)**



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Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
✓ Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	GIS derived, coarse scale Critical Terrestrial Biodiversity areas map (SANBI) considered the area of the Moot Plains Bushveld as a CBA1. Considering the above, and from the results of <u>the biodiversity specialist</u> is <u>in</u> this study, it is clear that the CBA1 status should only be applied to the eastern part (Pretoria-Hartebeespoort Dam-Rustenburg area) of the Moot Plains Bushveld, where biodiversity is indeed threatened. <u>It is the specialists opinion that the CBA</u> <u>should</u> not be applied to the western parts from Rustenburg to Zeerust. According to the SANBI Plants of South Africa database only a single red data plant species, Cineraria alchemilloides DC. subsp. Alchemilloides, was ever collected within the 2526CA grid. The current survey could not confirm the presence of this species on the site. There are no TOPS plant species present on the site.

c) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	5%	There is not much truly natural vegetation present along the proposed road alignments, as <u>mucsh</u> mush of this vegetation on the current road verge had been impacted upon by:

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		<p>Fires occurring at a frequency higher than the ecological requirements for bushveld (this has resulted in the dominance of grass species rather than woody species)</p> <p>Gravel heaps created over the years from road maintenance activities</p> <p>Overgrazing</p> <p>Erosion</p> <p>Invasive vegetation</p>
Near Natural (includes areas with low to moderate level of alien invasive plants)	50%	The majority of the vegetation along the alignment is in a near natural state with varying degrees of impact from the abovementioned activities.
Degraded (includes areas heavily invaded by alien plants)	5%	There are small sections along the alignment that contain heavy infestation of Invasive vegetation and erosion caused by poor drainage practices on the existing track.
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	40%	The proposed access follows existing farm access tracks and as such, a large portion of the activity is already transformed by the existing roads

c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems
Ecosystem threat status as per the National Environmental Management:	Critical	Wetland (including rivers, depressions, channelled and unchannelled wetlands, flats, seeps pans, and artificial wetlands)
	Endangered	
	✓ Vulnerable	
	Least	

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Biodiversity Act (Act No. 10 of 2004)	Threatened	<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	<input type="checkbox"/> UNSURE
---------------------------------------	------------	---	-----------------------------	---------------------------------

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

The vegetation, flora and vertebrate fauna study of the site revealed the presence of four plant communities as representative ecosystems. The study showed that the entire site should be classified under the Moot Plains Bushveld (Mucina & Rutherford 2006). According to Mucina & Rutherford (2006) the conservation status of the Moot Plains Bushveld is Vulnerable, although about 13% is statutorily protected. The reason for this conservation status is that almost 30% of Moot Plains Bushveld has been transformed, but this is mainly in the Pretoria-Hartebeespoort Dam-Rustenburg area, with considerable pressure for more development. The western part of Moot Plains Bushveld is, in contrast, quite natural, with very little transformed by development, and here it could be regarded as Least Threatened.

There are no TOPS plant species present on the site.

The watercourse on site is described above in Section B6.

8. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or paleontological sites, on or close (within 20m) to the site? If YES, explain:

<input type="checkbox"/> YES	<input checked="" type="checkbox"/> NO
Uncertain	

A number of aArchaeology sites have been identified by the heritage specialist. None of these sites will be impacted upon by any of the proposed access road alternatives and they are all located more than 20 m from the assessment corridors.

Comment [LC28]: Pls confirm

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If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

The significant archaeological sites (all stone walled and linked to the LIA) are all located on top of or around the sides of various hills and outcrops in these areas and will not be impacted on by the development which will avoid these areas.

The following is therefore recommended from an archaeological perspective:

All the stone walled sites in the areas should be demarcated and fenced-in to avoid accidental damage and to ensure preservation. An Archaeological Heritage Management Plan for these sites should be drafted and implemented. NOTE – This Cultural Heritage Management Plan forms Part of the overall EMPR (Attached in Appendix H) and has been approved by SAHRA.

The possibility of uncovering in situ material and sites here is unlikely and these areas have been used in the past for agricultural purposes and grazing. Any of the alternatives would therefore ~~be by~~ suitable-acceptable. From an Archaeological point of view the development should be allowed to continue taking heed of the above. The subterranean presence of archaeological sites, features or objects is always a possibility. This could include unknown and unmarked burial pits. Should any be uncovered during the development process and archaeologist should be called in to investigate and recommend on the best way forward.

Will any building or structure older than 60 years be affected in any way?

YES	✓NO
✓YES	NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

The heritage specialist, Mr Anton Pelser of APAC Heritage Consulting has been appointed to submit the application to SAHRA. Proof of this submission is included in Appendix J3.

Comment [LC29]: I don't think we need a permit, we just need comment as we are not anywhere near the heritage sites. A permit will not be required if we are going to do any Phase 2 mitigation, which for the road we aren't.

9. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

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Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

According to the IDP, [The current official unemployment rate is 10.0 % (In comparison to 16.1 % in 2011)]

Economic profile of local municipality:

It is important to note that new opportunities have opened up for municipal area since the need to facilitate the generation of sustainable energy was introduced in South Africa by Eskom and the South African government. Economic spin-offs are eagerly anticipated.

Comment [LC30]: Indicate skills levels so we can see how many people would be able to get job during construction. Also indicate access to basic sanitation and housing, as well as income levels

Level of education:

47.5% Completed Grade 9 or higher
26.7% Completed Matric or higher

Comment [LC31]: What is the remaining 25%???

b) **Socio-economic value of the activity**

What is the expected capital value of the activity on completion?

R

What is the expected yearly income that will be generated by or as a result of the activity?

R

Will the activity contribute to service infrastructure?

YES	NO
-----	----

Is the activity a public amenity?

YES	NO
-----	----

How many new employment opportunities will be created in the development and construction phase of the activity/ies?

--

Comment [LC32]: Please ask SESA to complete

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What is the expected value of the employment opportunities during the development and construction phase?	R
What percentage of this will accrue to previously disadvantaged individuals?	%
How many permanent new employment opportunities will be created during the operational phase of the activity?	
What is the expected current value of the employment opportunities during the first 10 years?	R
What percentage of this will accrue to previously disadvantaged individuals?	%

10. SPECIALIST(S) CONSULTATION

Has a specialist been consulted to assist with the completion of this section? YES NO

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix F. All specialist reports must be contained in Appendix G and must meet the requirement in Appendix 6 of EIA Regulations, 2014.

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SECTION C: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ~~IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN~~ IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE ~~PHASES~~ PHASES AS WELL AS PROPOSED MANAGEMENT OF ~~IDENTIFIED~~ IDENTIFIED IMPACTS AND PROPOSED ~~MITIGATION MEASURES~~ MITIGATION MEASURES

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

It should be noted that the impacts associated with Listed Activity 28 of Listing Notice 3 were previously assessed in the reporting for the approved application DEA Ref. No. 14/12/16/3/3/1/1601. In order to facilitate the consideration of Listed Activity 28 the detailed impacts of Listed Activity 28 (change of land use from agricultural to commercial) for the approved solar development have been included in App xx of this report. These impacts have not been summarised here in order to avoid confusion.

Activity	Impact summary	Significance	Proposed mitigation
Alternative 1 (preferred alternative)			
	Direct impacts:		
	Impacts on indigenous Plant Species	Low - Negative	Implement the approved Biodiversity Management Plan.

Comment [LC33]: What about the impacts of Listed Activity 28? Have you asked the case officer how to incorporate that?

We would suggest including a copy of your detailed impact assessment from the expansion BAR into the impact assessment appendix of this bar as well as including an impact summary table in the EIS statement below, as well as submitting the full approved BAR for the expansion area.

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Comment [LC34]: Suggest you ask the case officer to confirm this approach is acceptable.

Comment [LC35]: Don't you need to describe the construction activity under the Activity column?

Comment [LC36]: What about soil erosion as you said there was erosion on existing roads? Also impact on watercourses? Even if negligible it best it is described
 What about impacts of traffic on residents in the residential areas? Noise, nuisance, accidents spring to mind. It would be worth noting that all three alternatives pass less houses than the originally approved option

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Activity	Impact summary	Significance	Proposed mitigation
			Ensure disturbance is restricted to the footprint of the final road prism
	Impact on Invasive Plant Species	High Positive	Implement the invasive species control plan as outlined in the approved
	Impacts on Mammals	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Impact on Avifauna	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Impact on Herpetofauna	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Visual Impact	Low Negative	Align the access road along existing tracks as far as possible.
	Impact on Heritage Resources	Low Negative	Avoid all Archaeological features identified by the Heritage Specialist, Implement the Cultural Heritage Management Plan as approved by SAHRA
Alternative 2			
	Direct impacts:		
	Impacts on indigenous Plant Species	Low - Negative	Implement the approved Biodiversity Management Plan. Ensure disturbance is restricted to the footprint of the final road prism
	Impact on Invasive Plant Species	High Positive	Implement the invasive species control plan as outlined in the

Comment [LC37]: I think the contractors will need a bit of space along the edges of the road- but this would be rehabilitated afterwards. As such restricting the footprint to the final road prism seems a bit onerous. Can we change this?

Comment [LC38]: Sentence unfinished

Comment [LC39]: How can it be low neutral? It's either low or neutral or low to neutral but it can't be both low and neutral. Same comment for all impacts below containing neutral

Comment [LC40]: What about soil erosion as you said there was erosion on existing roads? Also impact on watercourses? Even if negligible it's best it is described
What about impacts of traffic on residents in the residential areas? Noise, nuisance, accidents spring to mind. It would be worth noting that all three alternatives pass less houses than the originally approved option

Comment [LC41]: Same comment as before

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Activity	Impact summary	Significance	Proposed mitigation
			approved
	Impacts on Mammals	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Impact on Avifauna	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Impact on Herpetofauna	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Visual Impact	Low Negative	Align the access road along existing tracks as far as possible.
	Impact on Heritage Resources	Low Negative	Avoid all Archaeological features identified by the Heritage Specialist, Implement the Cultural Heritage Management Plan as approved by SAHRA
Alternative 3			
	Direct impacts:		
	Impacts on indigenous Plant Species	Medium - Negative	Implement the approved Biodiversity Management Plan. Ensure disturbance is restricted to the footprint of the final road prism
	Impact on Invasive Plant Species	High Positive	Implement the invasive species control plan as outlined in the approved
	Impacts on Mammals	Low Neutral	Implement Speed Control Mechanisms during construction and operation

Comment [LC42]: Sentence unfinished

Comment [LC43]: What about soil erosion as you said there was erosion on existing roads?

What about impacts of traffic on residents in the residential areas? Noise, nuisance, accidents spring to mind. It would be worth noting that all three alternatives pass less houses than the originally approved option

Comment [LC44]: Sentence unfinished

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Activity	Impact summary	Significance	Proposed mitigation
	Impact on Avifauna	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Impact on Herpetofauna	Low Neutral	Implement Speed Control Mechanisms during construction and operation
	Visual Impact	Low Negative	Align the access road along existing tracks as far as possible.
	Impact on Heritage Resources	Low Negative	Avoid all Archaeological features identified by the Heritage Specialist, Implement the Cultural Heritage Management Plan as approved by SAHRA
No-go option			
	Direct impacts:		
	Impacts on indigenous Plant Species	Low - Neutral	Not Applicable
	Impact on Invasive Plant Species	Medium Negative	Not Applicable
	Impacts on Mammals	Neutral	Not Applicable
	Impact on Avifauna	Neutral	Not Applicable
	Impact on Herpetofauna	Neutral	Not Applicable
	Visual Impact	Neutral	Not Applicable
	Impact on Heritage Resources	Low Negative	Not Applicable

A complete impact assessment which include process undertaken to identify, assess and rank the impacts, the activity will impose on the site through the life of the activity in terms of EIA Regulation 2014, Appendix 1(i) and (j) of GN R.982 must be included as Appendix H.

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2. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Comment [LC45]: Suggest you do an impact summary table for each of the alternatives below so that you can provide the requested information.

Also do an impact summary table for Listed Activity 28

Alternative A 1 (preferred alternative)

Alternative A 1 (the preferred Alternative) has a similar impact to alternative B2. The impacts of these two alternatives have a low overall significance for the following key reasons:

- They are aligned along existing tracks and thus avoid further fragmentation of the landscape.
- The vegetation along the existing road verges has been largely transformed through overgrazing, and road maintenance activities.
- The removal of woody species will be limited, due to the disturbed nature of the existing road verges.
- No species protected in terms of the National Forest Act will be affected by this alignment.

This alternative is thus preferred by the applicant, as the biophysical impact is deemed to be acceptable, and the majority of the road is aligned on the same portion of property that will contain the PV development.

Furthermore the potential environmental impacts of Listed Activity 28 of Listing Notice 3 (GN. 983) are considered to be acceptable, as demonstrated by the existing approval for the solar development.

Comment [LC46]: Please indicate the range of significance of negative impacts and positive impacts and if any stand out please note it specifically (I don't think any did stand out)

Alternative 2B

Alternative 2B has a similar impact to alternative A1. The impacts of these two alternatives have a low overall significance for the following key reasons:

- They are aligned along existing tracks and thus avoid further fragmentation of the landscape.
- The vegetation along the existing road verges has been largely transformed through overgrazing, and road maintenance activities.
- The removal of woody species will be limited, due to the disturbed nature of the existing road verges.
- No species protected in terms of the National Forest Act will be affected by this alignment.

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This alternative is less preferred by the applicant, as the majority of the route in situated on property that is not under the direct control of the applicant.

Furthermore the potential environmental impacts of Listed Activity 28 of Listing Notice 3 (GN. 983) are considered to be acceptable, as demonstrated by the existing approval for the solar development.

Alternative C3

Alternative C-3 has a slightly higher impact on the biophysical environment as it is aligned closer to the Koppie that was identified as sensitive by the Botanical Specialist. Alternative C3 will also have a moderate impact on species protected in terms of the National Forest Act.

The potential environmental impacts of Listed Activity 28 of Listing Notice 3 (GN. 983) are considered to be acceptable, as demonstrated by the existing approval for the solar development.

Alternative C 3 is the least preferred from a Biophysical viewpoint.

Comment [LC47]: Biodiversity?

Comment [LC48]: Biodiversity?

No-go alternative (compulsory)

The no go alternative consists of constructing the access road as authorised in the Main Facilities Environmental Authorisation.

As described above, the authorised road is aligned under 3 high voltage cables and during this detailed design phase Eskom have refused consent for the project to obtain access underneath these powerlines. The no go alternative is thus at this stage no longer feasible but has been used as a baseline against which impacts will be assessed.

SECTION D: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Zeerust News
Date published	23 April (Zeerust News is the only newspaper in the area and only comes out on a monthly basis)

Comment [LC49]: update

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Site notice position	Latitude	Longitude
	25° 34' 22.04"	26° 05' 07.77"
	<u>25°33'45.42"S</u>	<u>26° 4'29.99"E</u>
	<u>25°34'6.97"S</u>	<u>26° 4'47.69"E</u>
Date placed	February 2017	

Comment [LC50]: this co-ordinate is for the existing Zeerust substation

Comment [LC51]: assume it hasn't already been placed? If so I hope it wasn't placed at the substation? If that is the case then I would suggest getting someone to put new notices up at these locations

Include proof of the placement of the relevant advertisements and notices in Appendix I1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN R.982.

Considering the extensive engagement that has taken place with I&AP's over the years regarding various aspects of this project, It is safe to assume that members of the public and stakeholders have had ample opportunity to provide comments associated with this proposed development as a whole. The extent of comments has most certainly decreased over time with each additional report where comment has been requested and this can be attributed to stakeholder fatigue. However all registered stakeholders will be given the opportunity to comment once more.

Table 1: Compliance of Public Participation with Legislated Requirements

Regulated Requirement	Description
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Regulated Requirement	Description
<p>(1) If the proponent is not the owner or person in control of the land on which the activity is to be undertaken, the proponent must, before applying for an environmental authorisation in respect of such activity, obtain the written consent of the landowner or person in control of the land to undertake such activity on that land.</p> <p>(2) Subregulation (1) does not apply in respect of-</p> <p>(a) linear activities;</p>	<p>Proof of landowner notification is attached in the application form that was submitted to the Department ².</p>
<p>The person conducting a public participation process must take into account any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of an application or proposed application which is subjected to public participation by -</p>	
<p>(a) fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of -</p> <p>(i) the site where the activity to which the application or proposed application relates is or is to be undertaken; and</p> <p>(ii) any alternative site;</p>	<p>A site notice has been placed at the entrance to portion 15 of the Farm Kameeldoring 271.</p> <p>Photographic evidence of these notices is attached in Appendix E1. E</p>
<p>(b) giving written notice, in any of the manners provided for in section 47D of the Act, to -</p>	

Comment [LC52]: what about Remainder of Portion 5 of Farm Hazia 240?

Comment [LC53]: See previous comments in this regard. The co-ordinate provided was on the zeerust substation

Comment [LC54]: Is this already included or will it be included in the final report? Same comment for most of the below rows

² The landowners associated with this activity is Mr. Johannes H Keulder of FSJ EIENDOMME CC and is the same landowner where the authorised facility is situated.

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Regulated Requirement	Description
(i) the occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site on which the activity is to be undertaken, the owner or person in control of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	The owner is the only current occupier of the site. Landowner notification letters are attached in the application form.
(ii) owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;	Owners of adjacent properties have been notified of this environmental process. Such owners have been requested to inform the occupiers of the land of this environmental process. Please refer to Appendix E2 for copies of these notifications
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;	The ward councillor has been notified of this environmental process. Please refer to Appendix E2 for copies of these notifications
(iv) the municipality which has jurisdiction in the area;	The Ramotshere Moiloa municipality has been notified of this environmental process. Please refer to Appendix E6 for copies of these notifications.
(v) any organ of state having jurisdiction in respect of any aspect of the activity; and	Please refer to the section below showing the list of organs of state that were notified as part of this environmental process. Please refer to Appendix E4 for copies of these notifications.
(vi) any other party as required by the competent authority;	The competent authority has not, <u>at or after the pre-application meeting held on xxx</u> , identified any additional parties that need to be notified in light of this Basic Assessment Process.

Comment [LC55]: Also municipality as noted before

Comment [LC56]: Check table formatting

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Regulated Requirement	Description
<p>(c) placing an advertisement in -</p> <p>(i) one local newspaper; or</p> <p>(ii) any official Gazette that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;</p>	<p>A notice of the public participation process has been placed in "Die Zeerust Nuus".</p> <p>Please refer to Appendix E1 for a copy of this advertisement.</p> <p>There is currently no official Gazette that has been published specifically for the purpose of providing public notice of applications</p>
<p>(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official Gazette referred to in paragraph (c)(ii);and</p>	<p>Adverts were not placed in provincial or national newspapers, as the potential impacts will not extend beyond the borders of the municipal area.</p>
<p>(e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desirous of but unable to participate in the process due to -</p> <p>(i) illiteracy;</p> <p>(ii) disability; or</p> <p>(iii) any other disadvantage.</p>	<p>Notifications have included provision for alternative engagement in the event of illiteracy, disability or any other disadvantage. In such instances, Cape EAPrac will engage with such individuals in such a manner as agreed on with the competent authority.</p>
<p>(3) A notice, notice board or advertisement referred to in subregulation (2) must -</p> <p>(a) give details of the application or proposed</p>	<p>A site notice has been placed at the entrance to Portion 15 of the Farm Kameeldoom 270.</p> <p>Photographic evidence of these notices is attached</p>

Comment [LC57]: As before

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Regulated Requirement	Description
<p>application which is subjected to public participation; and</p> <p>(b) state -</p> <p>(i) whether basic assessment or S&EIR procedures are being applied to the application;</p> <p>(ii) the nature and location of the activity to which the application relates;</p> <p>(iii) where further information on the application or proposed application can be obtained; and</p> <p>(iv) the manner in which and the person to whom representations in respect of the application or proposed application may be made.</p>	<p>in Appendix E1.</p>
<p>(4) A notice board referred to in subregulation (2) must -</p> <p>(a) be of a size at least 60cm by 42cm; and</p> <p>(b) display the required information in lettering and in a format as may be determined by the competent authority.</p>	<p>The site notices placed comply with these minimum requirements. Please refer to Appendix E1 for details of these</p>
<p>(5) Where public participation is conducted in terms of this regulation for an application or proposed application, subregulation (2)(a), (b), (c) and (d) need not be complied with again during the additional public participation process contemplated in regulations 19(1)(b) or 23(1)(b) or the public participation process contemplated in regulation 21(2)(d), on condition that -</p>	<p>Due to the fact that stakeholders or specialists have not raised significant concerns on this environmental process, it is not envisioned that this project will be required to compile a revised Basic Assessment Report. <u>However this will be confirmed after the public participation period.</u></p>

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Regulated Requirement	Description
<p>(a) such process has been preceded by a public participation process which included compliance with subregulation (2)(a), (b), (c) and (d); and</p> <p>(b) written notice is given to registered interested and affected parties regarding where the -</p> <p>(i) revised basic assessment report or, EMPr or closure plan, as contemplated in regulation 19(1)(b);</p> <p>(ii) revised environmental impact report or EMPr as contemplated in regulation 23(1)(b);or</p> <p>(iii) environmental impact report and EMPr as contemplated in regulation 21(2)(d);</p> <p>may be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due.</p>	
<p>(6) When complying with this regulation, the person conducting the public participation process must ensure that -</p> <p>(a) information containing all relevant facts in respect of the application or proposed application is made available to potential interested and affected parties; and</p> <p>(b) participation by potential or registered interested and affected parties is facilitated in such</p>	<p>All reports that are submitted to the competent authority have been subjected to a public participation process. These include:</p> <p>Basic Assessment Report</p> <p>All specialist reports</p> <p>All technical and design reports</p> <p>Environmental Management Plan</p>

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Regulated Requirement	Description
<p>a manner that all potential or registered interested and affected parties are provided with a reasonable opportunity to comment on the application or proposed application.</p> <p>(7) Where an environmental authorisation is required in terms of these Regulations and an authorisation, permit or licence is required in terms of a specific environmental management Act, the public participation process contemplated in this Chapter may be combined with any public participation processes prescribed in terms of a specific environmental management Act, on condition that all relevant authorities agree to such combination of processes.</p>	

Key stakeholders (other than organs of state) identified in terms of Regulation 40(2)(d) of GN R.982:

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Birdlife Africa	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Ikageng Community Trust	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Ramotshere Moiloa Municipality	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5

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Department Of Agriculture, Forestry and Fisheries	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Department of Water And Sanitation	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Square Kilometre Array	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Department of Economic Development, Environment, Conservation and Tourism	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Eskom	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Sentech	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Department of Communications	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Roads and Public Works	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Department of Energy	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
Department of Rural Development and Land Reform	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5
SAHRA	See attached I&AP Register in Appendix E5	See attached I&AP Register in Appendix E5

Include proof that the key stakeholder received written notification of the proposed activities as Appendix I2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or



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- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

This section will be updated after the 30 Day comment period on the Basic Assessment Report.

Summary of main issues raised by I&APs	Summary of response from EAP

4. COMMENTS AND RESPONSE REPORT

The practitioner must make report (s) available to I&APs record all comments received from I&APs and respond to each comment before is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA Regulations and be attached to the Final BAR as Appendix I3.

4.5. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub-regulation to the extent and in the manner as may be agreed to by the competent authority.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as Appendix I5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix I6.

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SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

✓YES	NO
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If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment).

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application.

Cape EAPrac is of the opinion that the information contained in the Draft Basic Assessment Report and the documentation attached was sufficient to allow the general public and key stakeholders to apply their minds to the potential negative and positive impacts associated with the development of the RE Capital 2 Solar – Access Road.

Aside from potential negative impacts, it is submitted that the proposed Access Road has notable positive impacts, in that it aligns with, and is in furtherance of, international, national, regional and local strategies to support alternative / renewable energy projects. These include the distribution of much-needed 'clean' electricity into the national grid, provision of local electrical infrastructure for use in long-term, and the provision of employment opportunities during the construction and operation phases for members of local communities.

Sufficient mitigation has been recommended to reduce potential negative impacts to an acceptable level. It is submitted that the proposed installation of the preferred overhead powerline alternatives-access road will be sustainable in the long term and the preferred alternative can be considered to be the most feasible / viable option, from environmental and practical perspectives.

It is recommended that the following be included as conditions of authorisation:

The access road must be limited to a maximum width of 10m which should include all associated structures such as side drains and road verge.

The recommendations contained in the Basic Assessment Report must be adopted and implemented.

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Stormwater and any runoff generated by the hard surfaces should be discharged into retention swales.
 Littering and contamination of water sources during construction must be prevented by effective construction camp management.
 Emergency plans must be in place in case of spillages onto road surfaces and water courses.
 No stockpiling should take place within 50m of a water course.
 All stockpiles must be protected from erosion, stored on flat areas where run-off will be minimised, and be surrounded by bunds.

- If very dry conditions prevail and dust becomes a nuisance, dust suppression measures need to be implemented.
- The Biodiversity Management Plan must be adopted and Implemented.

The Cultural Heritage Management Plan must be adopted and ~~Implemented~~Implemented.

The EMPr that meet the requirements of EIA Regulation,2014, Appendix 4, must be attached as Appendix J.

Is an EMPr attached?

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

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix K

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix F

Any other information relevant to this application and not previously included must be attached in Appendix L.

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SECTION F: AFFIRMATION BY EAP

(DALE WARREN HOLDER (name of person representing EAP) of _____

(CAPE ENVIRONMENTAL ASSESSMENT PRACTITIONERS (PTY) LTD (name of
company) declare that the information provided is correct and relevant to the activity/ project and that, the
information was made available to interested and affected parties for their comments. All specialist (s) reports are
relevant for the competent authority to make informed decision.

SIGNATURE OF EAP _____ DATE



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