### SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE ENVIRONMENTAL SENSITIVITY

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### **EIA Reference number:**

Project name: Highveld Solar Power Plant

**Project title:** Highveld Solar Power Plant

Date screening report generated: 08/12/2022 22:20:25

Applicant: Highveld Solar Power Plant (RF) (Pty) Ltd

**Compiler:** Environamics

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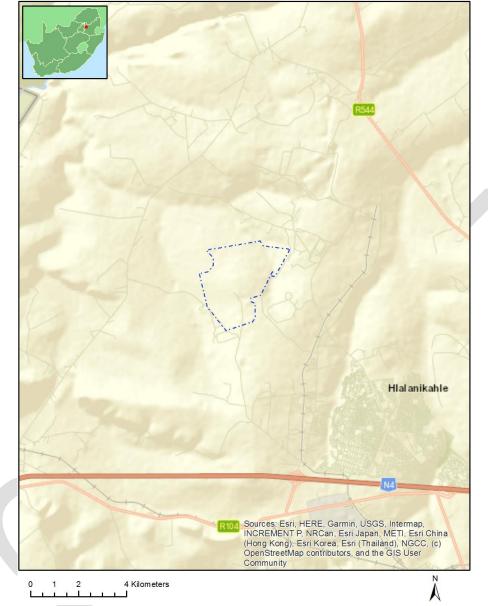
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

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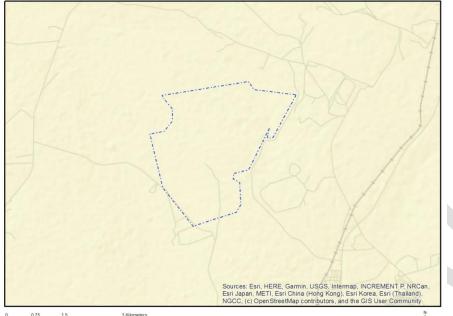
# **Proposed Project Location**

### Orientation map 1: General location



**General Orientation: Highveld Solar Power Plant** 

# Map of proposed site and relevant area(s)



0 0.75 1.5 3 Kilomete

### Cadastral details of the proposed site

### Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	CORONATION	280	0	25°48'37.03S	29°4'30.17E	Farm
2	KLEINWATER	301	0	25°49'7.18S	29°2'17.91E	Farm
3	KROMDRAAI	279	0	25°46'27.93S	29°3'53.6E	Farm
4	KROMDRAAI	279	34	25°47'39.2S	29°4'42.68E	Farm Portion
5	KROMDRAAI	279	47	25°47'45.61S	29°4'6.8E	Farm Portion
6	KROMDRAAI	279	15	25°47'55.15S	29°3'40.71E	Farm Portion
7	KLEINWATER	301	11	25°49'22.7S	29°1'51.81E	Farm Portion
8	KROMDRAAI	279	30	25°47'21.35S	29°2'55.55E	Farm Portion
9	CORONATION	280	0	25°48'39.18S	29°4'25.93E	Farm Portion
10	KROMDRAAI	279	16	25°47'14.05S	29°4'20.49E	Farm Portion
11	KROMDRAAI	279	46	25°48'22.44S	29°4'0.12E	Farm Portion
12	KLEINWATER	301	2	25°49'43.59S	29°3'20.97E	Farm Portion
13	KROMDRAAI	279	2	25°48'10.19S	29°3'23.7E	Farm Portion
14	KROMDRAAI	279	9	25°47'6.26S	29°4'3.74E	Farm Portion
15	KROMDRAAI	279	45	25°48'40.57S	29°3'51.95E	Farm Portion
16	KROMDRAAI	279	8	25°47'19.28S	29°3'39.2E	Farm Portion
17	KROMDRAAI	279	48	25°47'59.77S	29°4'13.94E	Farm Portion
18	KLEINWATER	301	17	25°48'31.79S	29°2'43.44E	Farm Portion

Development footprint<sup>1</sup> vertices: No development footprint(s) specified.

<sup>&</sup>lt;sup>1</sup> "development footprint", means the area within the site on which the development will take place and incudes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

Environmental Management Frameworks relevant to the application

Dinokeng Garden Rou Gauteng EM Moghaka El Ngwathe EM Olifants EM Siyanda Dis The Msundu Vredeford D	IF- IF-   AF- IF-   IF- IF-
0 0.75	1.5 3 Kilometers
Environm ental Managem ent Framewor k	LINK
Olifants EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Zone 46, 67, 78 , 80, 92, 103, 122, 129.pdf

### Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

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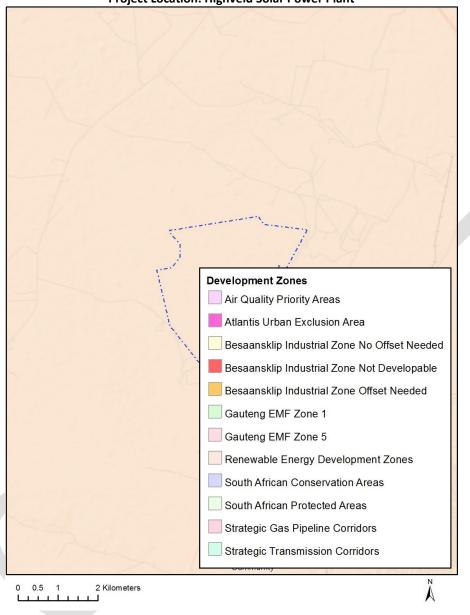
### Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

### Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incenti ve, restrict ion or prohibi tion	Implication
Strategic Transmis sion Corridor- Internati onal corridor	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Com bined_EGI.pdf
Air Quality- Highveld Priority Area	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/HIGH VELD_PRIORITY_AREA_AQMP.pdf
Renewab le energy develop ment zones 9- Emalahle ni	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Com bined_REDZ.pdf

# Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones



Project Location: Highveld Solar Power Plant

### Proposed Development Area Environmental Sensitivity

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme	Х			
Animal Species Theme		Х		
Da == 7 = f 21				Disalating an analise

Aquatic Biodiversity Theme	Х		
Archaeological and Cultural			Х
Heritage Theme			
Avian Theme			Х
Civil Aviation (Solar PV)			Х
Theme			
Defence Theme			Х
Landscape (Solar) Theme	Х		
Paleontology Theme	Х		
Plant Species Theme		Х	
RFI Theme			Х
Terrestrial Biodiversity Theme	Х		

### Specialist assessments identified

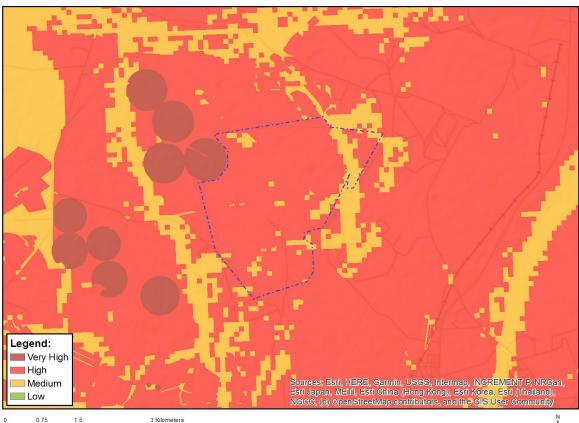
Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

N	Special	Assessment Drotocol
	-	Assessment Protocol
0	ist	
	assess	
	ment	
1	Agricult ural Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted WindAndSolar Agriculture Assessment Protocols.pdf
2	Landsca pe/Visu al Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_General_Requirement_Assessment_Protocols.pdf
3	Archaeo logical and Cultural Heritage Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted General Requirement Assessment Protocols.pdf
4	Palaeon tology Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_General_Requirement_Assessment_Protocols.pdf
5	Terrestri al Biodiver sity Impact Assessm ent	<u>https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols</u> /Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiver sity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

7	Impact Assessm ent Civil Aviation Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_Defence_Installations_Assessment_Protocols.pdf
9	RFI Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_General_Requirement_Assessment_Protocols.pdf
1 0	Geotech nical Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_General_Requirement_Assessment_Protocols.pdf
1 1	Socio- Economi c Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_General_Requirement_Assessment_Protocols.pdf
1 2	Plant Species Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted_Plant_Species_Assessment_Protocols.pdf
1 3	Animal Species Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted Animal Species Assessment Protocols.pdf

## Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.



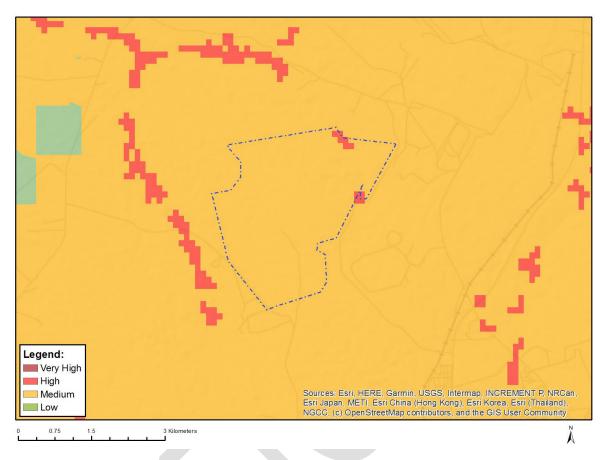
### MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

0.75 1.5 A

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
High	Old Fields;Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
High	Old Fields;Land capability;09. Moderate-High/10. Moderate-High
High	Annual Crop Cultivation / Planted Pastures Rotation; Land capability; 06. Low-Moderate/07. Low-
	Moderate/08. Moderate
High	Annual Crop Cultivation / Planted Pastures Rotation; Land capability; 09. Moderate-High/10. Moderate-
	High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Pivot Irrigation;Land capability;09. Moderate-High/10. Moderate-High

### MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at <u>eiadatarequests@sanbi.org.za</u> listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

• • • •	/)
Sensitivity	Feature(s)
High	Aves-Circus ranivorus
Medium	Aves-Tyto capensis
Medium	Aves-Hydroprogne caspia
Medium	Aves-Sagittarius serpentarius
Medium	Aves-Eupodotis senegalensis
Medium	Mammalia-Crocidura maquassiensis
Medium	Mammalia-Dasymys robertsii
Medium	Mammalia-Hydrictis maculicollis
Medium	Mammalia-Ourebia ourebi ourebi
Medium	Reptilia-Kinixys lobatsiana

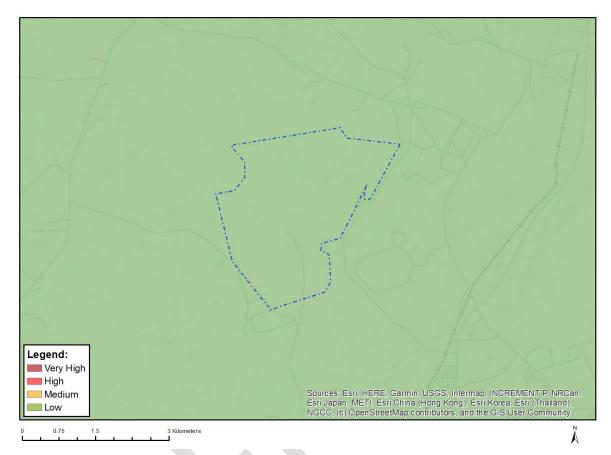
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### MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
х			

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Wetlands and Estuaries
Very High	Wetlands and Estuaries

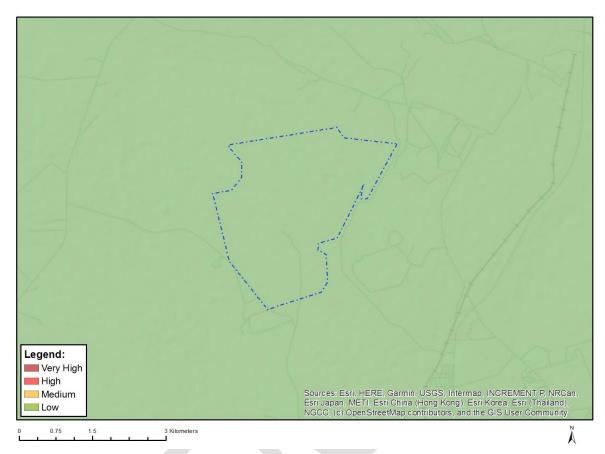
# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low sensitivity

### MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low Sensitivity

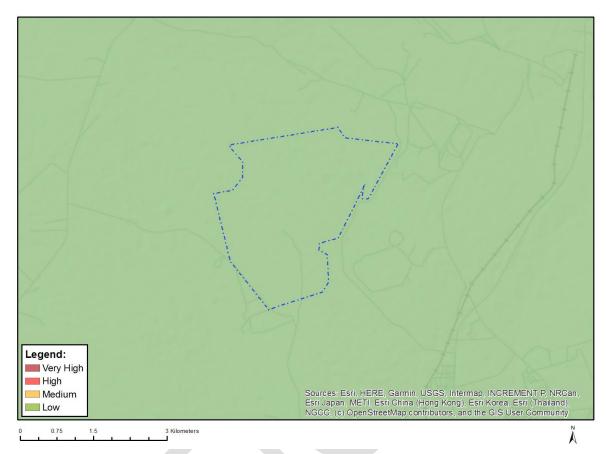
# Image: Syst HERE Gamma, USGS, Internap, INCREMENT P, NRGam, USGS, USGS,

### MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	No major or other types of civil aviation aerodromes

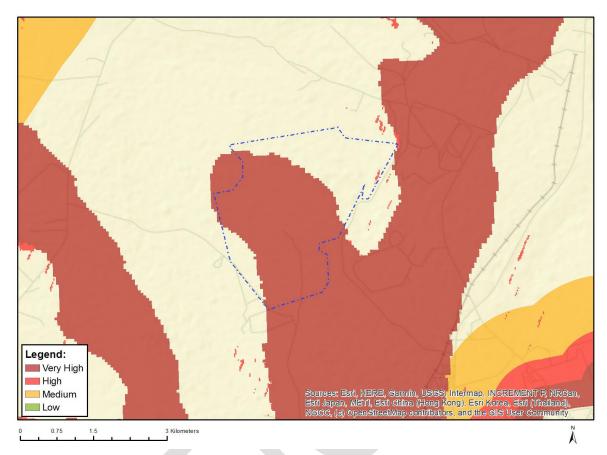
### MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low sensitivity

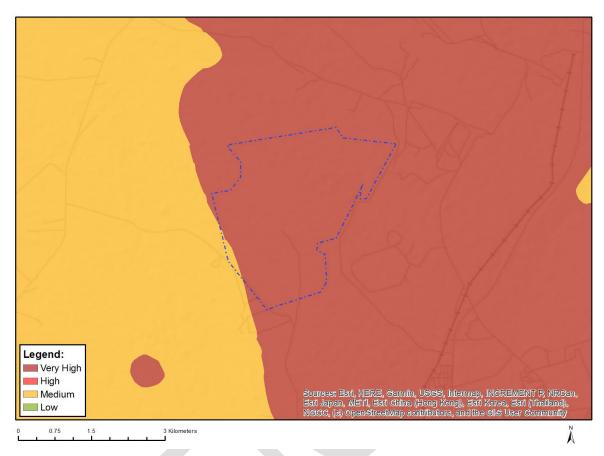
### MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity	Feature(s)	
High	Slope between 1:4 and 1:10	
Very High	Mountain tops and high ridges	

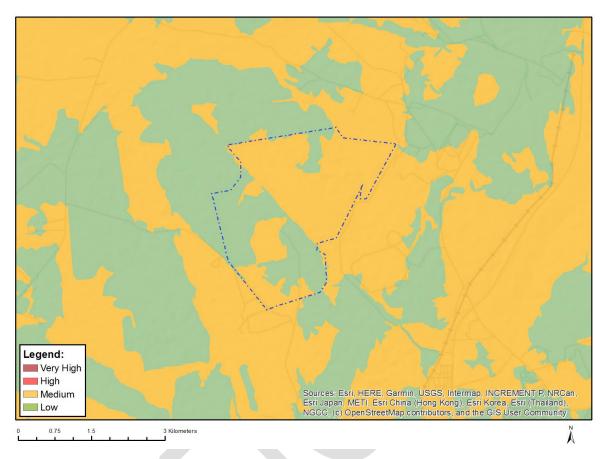
### MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity
Very High	Features with a Very High paleontological sensitivity

### MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

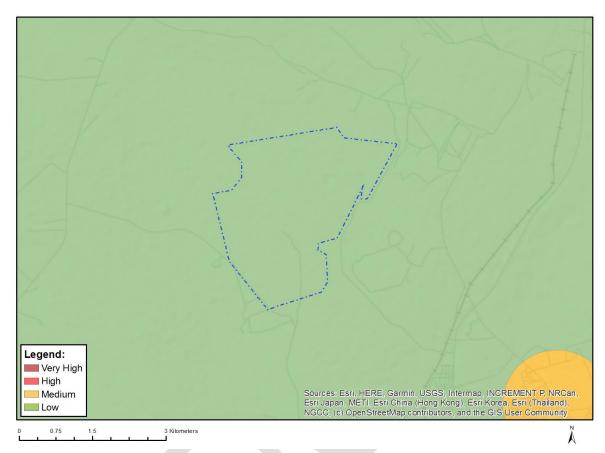


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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		х	

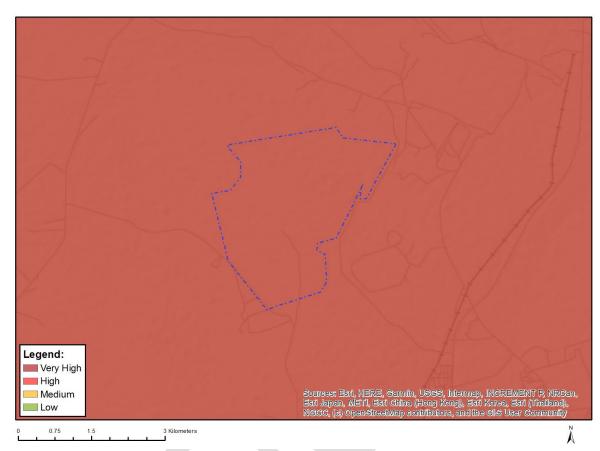
Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1252
Medium	Sensitive species 601
Medium	Ophioglossum gracillimum
Medium	Sensitive species 51
Medium	Pavetta zeyheri subsp. middelburgensis
Medium	Sensitive species 933
Medium	Sensitive species 691
Medium	Pachycarpus suaveolens
Medium	Brachycorythis conica subsp. transvaalensis

### MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Х

Sensitivity	Feature(s)
Low	Low sensitivity



### MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Х			

Sensitivity Feature(s)	
Very High	Critical biodiveristy area 1
Very High	Critical biodiveristy area 2
Very High	Ecological support area: local corridor
Very High	Protected Areas Expansion Strategy
, .	
Very High	Vulnerable ecosystem