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

EIA Reference number: Not Assigned

Project name: Hercules Solar Cluster - Hartebeest Hoek Solar PV1

Project title: Proposed Hartebeest Hoek Solar PV1 development on the Farm Hartebeest Hoek 31,

De Aar, Northern Cape

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Applicant: Hartebeest Hoek Solar PV1

Compiler: Sharples Environmental Services cc

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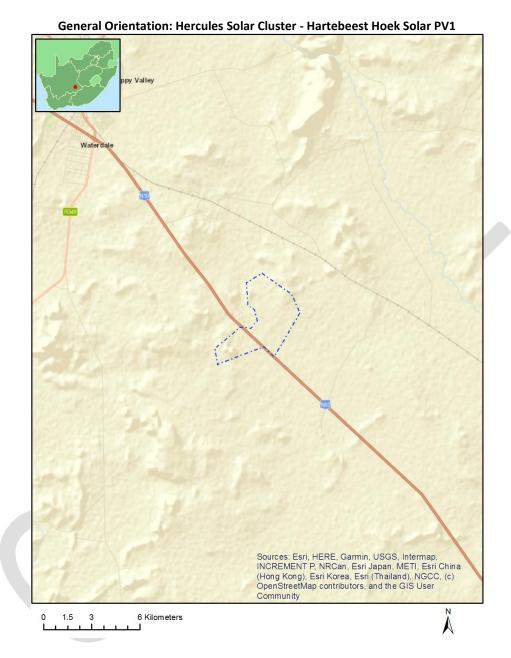
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

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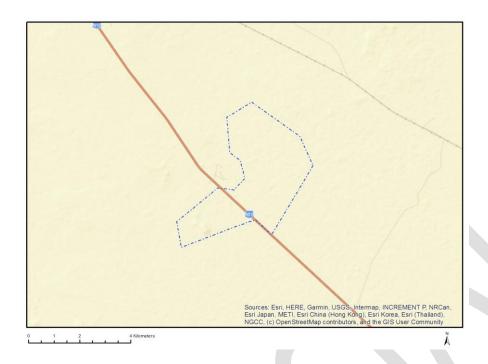
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Proposed Project Location

Orientation map 1: General location



Map of proposed site and relevant area(s)



Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	HARTEBEEST HOEK	31	0	30°46'2.99S	24°4'33.4E	Farm
2	HARTEBEEST HOEK	31	3	30°45'51.01S	24°5'42.77E	Farm Portion
3	HARTEBEEST HOEK	31	0	30°45'39.63S	24°6'38.02E	Farm Portion
4	HARTEBEEST HOEK	31	4	30°45'6.05S	24°5'8.01E	Farm Portion
5	HARTEBEEST HOEK	31	0	30°46'2.24S	24°4'58.48E	Farm Portion

Development footprint¹ vertices: No development footprint(s) specified.

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

¹ "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.

1 2	EIA Reference No	Classification	Status of	Distance from proposed
2			application	area (km)
2	14/12/16/2/2/2/2/202/1/444	Solar PV	Approved	5.7
	14/12/16/3/3/2/382/1/AM4 12/12/20/2250/2/AM5	Solar PV	Approved	0
3	12/12/20/2250/4/AM3	Solar PV	Approved	8.6
4	14/12/16/3/3/2/382/7	Solar PV	Approved	5.7
5	12/12/20/2250/3/AM3	Solar PV	Approved	6.2
6	14/12/16/3/3/2/382/5/A1	Solar PV	Approved	5.7
7	14/12/16/3/3/2/382/1/A1	Solar PV	Approved	5.7
8	14/12/16/3/3/2/382/3/A2	Solar PV	Approved	5.7
9	12/12/20/2177	Solar PV	Approved	5.4
10	12/12/20/2250/1/AM1	Solar PV	Approved	0
11	12/12/20/2500/AM2	Solar PV	Approved	18.5
12	12/12/20/2463/1/AM3	Wind	Approved	17.6
13	12/12/20/2250/3	Solar PV	Approved	6.2
14	12/12/20/2025	Solar - CSP	Approved	17.3
15	14/12/16/3/3/1/2569	Solar PV	Approved	6.7
16	14/12/16/3/3/2/382/3/AM4	Solar PV	Approved	5.7
17	12/12/20/2250/2	Solar PV	Approved	0
18	12/12/20/2250/5	Solar PV	Approved	13
19	12/12/20/2463/1/AM5	Wind	Approved	17.6
20	14/12/16/3/3/2/382/4/AM3	Solar PV	Approved	5.7
21	12/12/20/2500/AM5	Solar PV	Approved	18.5
22	14/12/16/3/3/2/382/A1	Solar PV	Approved	5.7
23	14/12/16/3/3/2/2167	Solar PV	Approved	23.5
24	12/12/20/2250	Solar PV	Approved	0
25	12/12/20/2250/4/A1	Solar PV	Approved	8.6
26	12/12/20/2048/3	Solar PV	Approved	15.8
27	14/12/16/3/3/2/382/AM4	Solar PV	Approved	5.7
28	12/12/20/2313/AM2	Solar PV	Approved	4.4
29	12/12/20/2048/4	Solar PV	Approved	15.8
30	14/12/16/3/3/2/382/5/AM3	Solar PV	Approved	5.7
31	12/12/20/2025/1	Solar - CSP	Approved	17.3
32	14/12/16/3/3/1/2508	Solar PV	Approved	5.4
33	12/12/20/2025/2	Solar PV	Approved	17.3
34 35	12/12/20/2250/2/AM2	Solar PV	Approved	0
	12/12/20/2463/1/A2	Wind	Approved	17.6
36	12/12/20/2048/2	Solar PV	Approved	15.8
37 38	14/12/16/3/3/2/382/3/AM3 12/12/20/2498/AM3	Solar PV Solar PV	Approved Approved	5.7 13.5
39	12/12/20/2498/AM3	Solar PV	Approved	0
40	12/12/20/2250/2/AM3 12/12/20/2025/2/A	Solar PV	Approved	17.3
41	14/12/16/3/3/2/382/4/A1	Solar PV	Approved	5.7
42	12/12/20/2250/2/A1	Solar PV	Approved	0
43	14/12/16/3/3/2/382/3	Solar PV	Approved	5.7
44	12/12/20/2252/2/AM4	Solar - CSP	Approved	0
45	14/12/16/3/3/2/2156	Solar PV	Approved	2.9
46	14/12/16/3/3/2/382/2/AM1	Solar PV	Approved	5.7
47	12/12/20/2463/1/AM4	Wind	Approved	17.6
48	14/12/16/3/3/2/998	Solar PV	Approved	17.7
49	12/12/20/2500	Solar PV	Approved	18.5
50	12/12/20/2048/1	Solar PV	Approved	15.8
51	12/12/20/2250/5/AM2	Solar PV	Approved	13
52	14/12/16/3/3/2/382/2/AM2	Solar PV	Approved	5.7
53	14/12/16/3/3/2/2157	Solar PV	Approved	8.6
54	12/12/20/2250/1/AM2	Solar PV	Approved	0
55	12/12/20/2498	Solar PV	Approved	13.5
56	14/12/16/3/3/2/2155	Solar PV	Approved	6.2

57	14/12/16/3/3/1/2323	Solar PV	Approved	3.5
58	12/12/20/2250/1	Solar PV	Approved	0
59	12/12/20/2500/AM3	Solar PV	Approved	18.5
60	14/12/16/3/3/2/382/1	Solar PV	Approved	5.7
61	12/12/20/2463/2	Wind	Approved	17.6
62	14/12/16/3/3/2/382/6	Solar PV	Approved	5.7
63	12/12/20/2258/4	Solar PV	Approved	23.1
64	12/12/20/2463/1	Wind	Approved	25.3
65	14/12/16/3/3/1/2585	Solar PV	Approved	5.7
66	12/12/20/2177/AM1	Solar PV	Approved	5.4
67	12/12/20/2498/A1	Solar PV	Approved	13.5
68	14/12/16/3/3/2/382/1/AM5	Solar PV	Approved	5.7
69	12/12/20/2463/2/AM2	Wind	Approved	29.3
70	12/12/20/2250/2/AM4	Solar PV	Approved	0
71	12/12/20/2250/4/AM2	Solar PV	Approved	8.6
72	14/12/16/3/3/2/382/2	Solar PV	Approved	5.7
73	12/12/20/2250/4/AM4	Solar PV	Approved	8.6
74	14/12/16/3/3/1/2557	Wind	Approved	0
75	12/12/20/2463/1/2	Wind	Approved	17.6
76	12/12/20/1651	Wind	Approved	3.5
77	14/12/16/3/3/2/382/AM3	Solar PV	Approved	5.7
78	12/12/20/1651/A2	Wind	Approved	3.5
79	14/12/16/3/3/2/382/4	Solar PV	Approved	5.7
80	14/12/16/3/3/2/382/5	Solar PV	Approved	5.7
81	12/12/20/2250/4	Solar PV	Approved	8.6
82	12/12/20/1673	Solar PV	Approved	18.5
83	12/12/20/2500/AM6	Solar PV	Approved	18.5
84	12/12/20/2499/AM8	Solar PV	Approved	5.8
85	14/12/16/3/3/2/382/6/AM3	Solar PV	Approved	5.7
86	14/12/16/3/3/2/382/1/AM3	Solar PV	Approved	5.7
87	12/12/20/2250/5/A1	Solar PV	Approved	13
88	14/12/16/3/3/1/2329	Wind	Approved	24.5
89	14/12/16/3/3/2/382/4/A3	Solar PV	Approved	5.7
90	14/12/16/3/3/2/2267	Solar PV	Approved	13.6

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

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:

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.

Incentive, restriction Implication

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or prohibition	
Strategic Transmission	https://screening.environment.gov.za/ScreeningDownloads/Developmen
Corridor-Central corridor	tZones/Combined_EGI.pdf

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	High	Medium	Low
	sensitivity	sensitivity	sensitivity	sensitivity
Agriculture Theme			X	
Animal Species Theme		X		
Aquatic Biodiversity Theme	Χ			
Archaeological and Cultural				Х
Heritage Theme				
Avian Theme				X
Civil Aviation (Solar PV)				Х
Theme				
Defence Theme				Х
Landscape (Solar) Theme	X			
Paleontology Theme	X			
Plant Species Theme				Х
RFI Theme	X			
Terrestrial Biodiversity Theme	X			

Specialist assessments identified

Based on the selected classification, and the known impacts associated with the proposed development, 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.

No	Specialist	Assessment Protocol
	assessment	
1	Agricultural Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_WindAndSolar_Agriculture_Assessme nt_Protocols.pdf
2	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_General_Requirement_Assessment_P rotocols.pdf
3	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted General Requirement Assessment P rotocols.pdf
4	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_General_Requirement_Assessment_P rotocols.pdf
5	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse

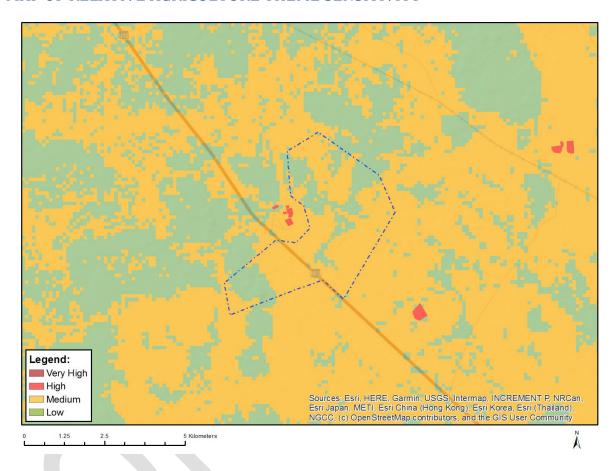
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		ssmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_ Protocols.pdf
6	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Pr otocols.pdf
7	Civil Aviation Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted Civil Aviation Installations Assessme nt Protocols.pdf
8	Defense Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted Defence Installations Assessment Pr otocols.pdf
9	RFI Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted_General_Requirement_Assessment_P rotocols.pdf
10	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted General Requirement Assessment P rotocols.pdf
11	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted General Requirement Assessment P rotocols.pdf
12	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/Asse ssmentProtocols/Gazetted Plant Species Assessment Protocols. pdf
13	Animal Species Assessment	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.

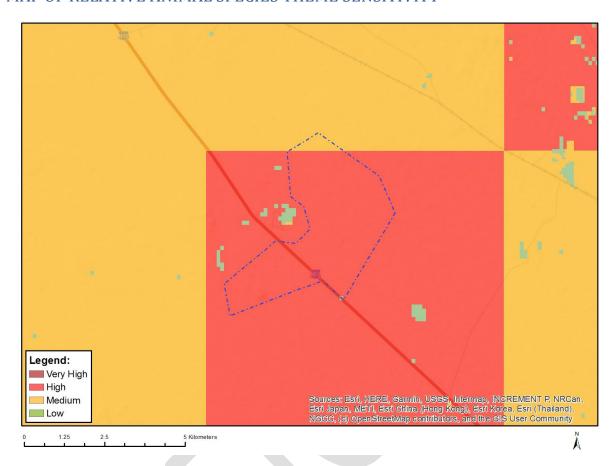
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

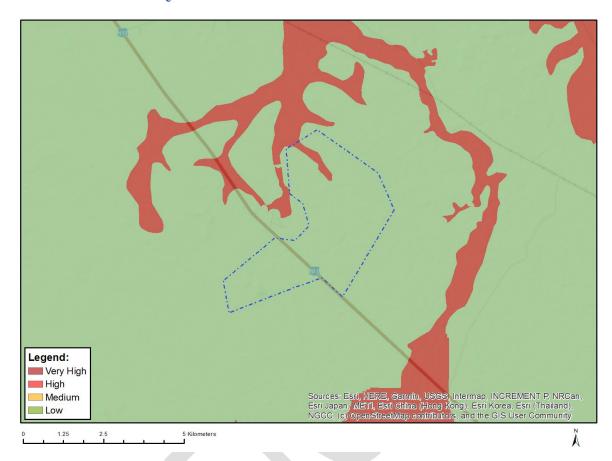


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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-Neotis ludwigii
Low	Subject to confirmation
Medium	Aves-Aquila rapax
Medium	Aves-Neotis ludwigii

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)	
Low	Low sensitivity	
Very High	Wetlands_(River)	

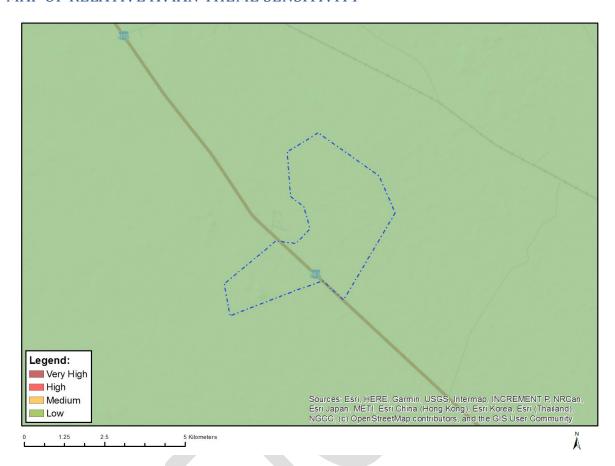
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

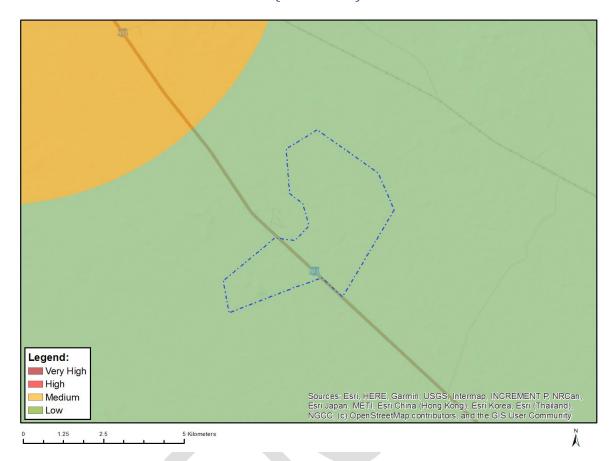
MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low Sensitivity	

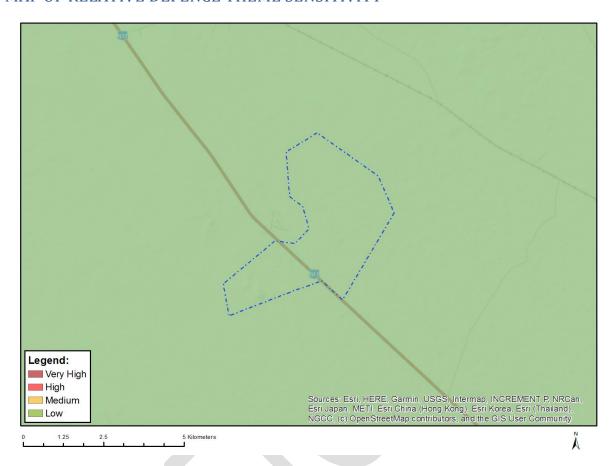
MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

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

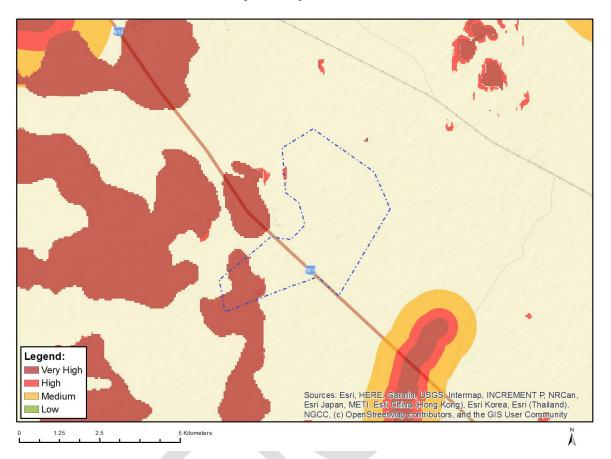
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

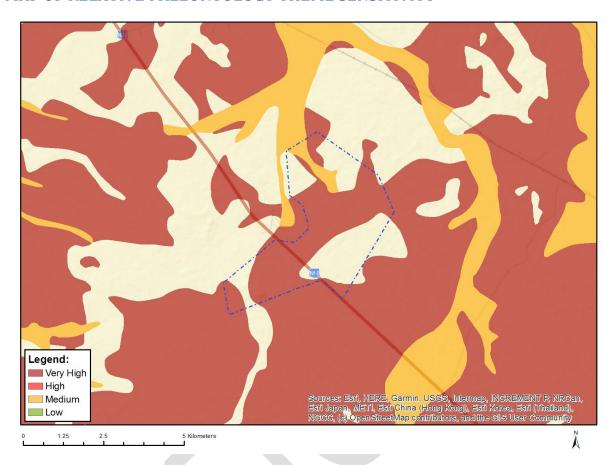
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

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

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

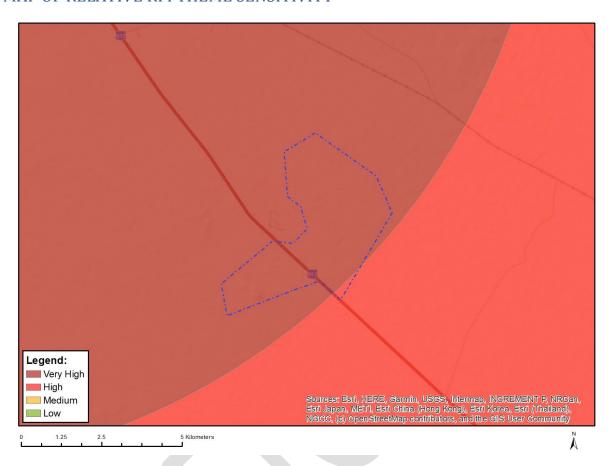


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their 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
			Χ

Sensitivity	Feature(s)
Low	Low Sensitivity

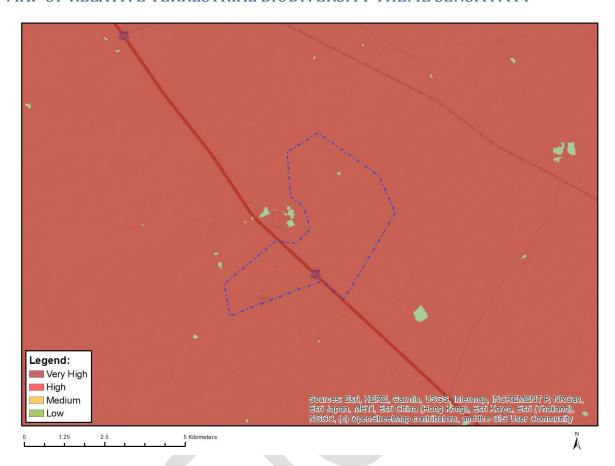
MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
High	Between 18 and 30 km from a Weather Radar installation and within the radar's line of sight
Very High	Less than 18 km form a Weather Radar installation

MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	ESA