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

EIA Reference number: TBC

Project name: Luckhoff Solar 1

**Project title:** Proposed Luckhoff Photovoltaic Solar Power Plant 1 Near Luckhoff, Free State

Province

Date screening report generated: 20/12/2022 15:56:21

Applicant: Luckhoff Solar 1 (Pty) Ltd

**Compiler:** Environamics Environmental Consultants

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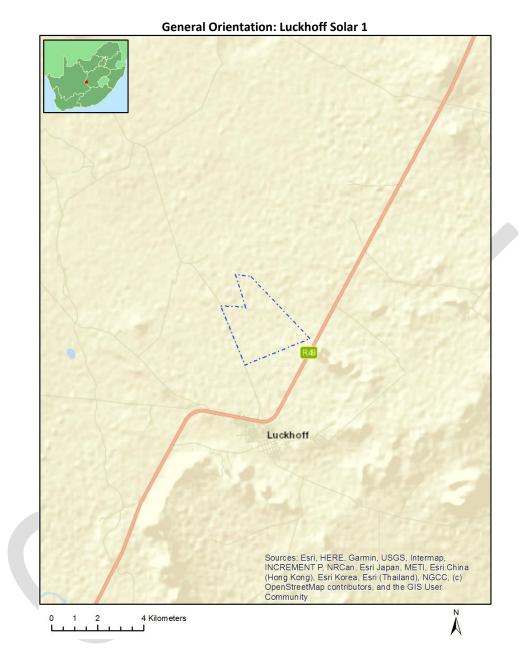
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

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# **Proposed Project Location**

# Orientation map 1: General location



# 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	DE DORPSGRONDEN VAN LUCKHOFF	577	0	29°44'38.3S	24°48'4.05E	Farm
2	SOLON	239	0	29°42'44.68S	24°49'22.21E	Farm
3	RORICH'S HULP	505	0	29°42'56.69S	24°45'12.12E	Farm
4	ROODEDAM	1211	0	29°40'48.56S	24°45'36.62E	Farm
5	MOOIDOORNS	1224	0	29°41'55.43S	24°44'48.51E	Farm
6	SOLON	239	0	29°42'44.68S	24°49'22.21E	Farm Portion
7	DE DORPSGRONDEN VAN LUCKHOFF	577	0	29°45'21.81S	24°46'57.55E	Farm Portion
8	RORICH'S HULP	505	0	29°42'56.84S	24°45'18E	Farm Portion
9	DE DORPSGRONDEN VAN LUCKHOFF	577	1	29°44'47.1S	24°48'1.21E	Farm Portion
10	MOOIDOORNS	1224	0	29°41'56.97S	24°44'47.7E	Farm Portion
11	ROODEDAM	1211	0	29°40'32.74S	24°45'28.29E	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

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:

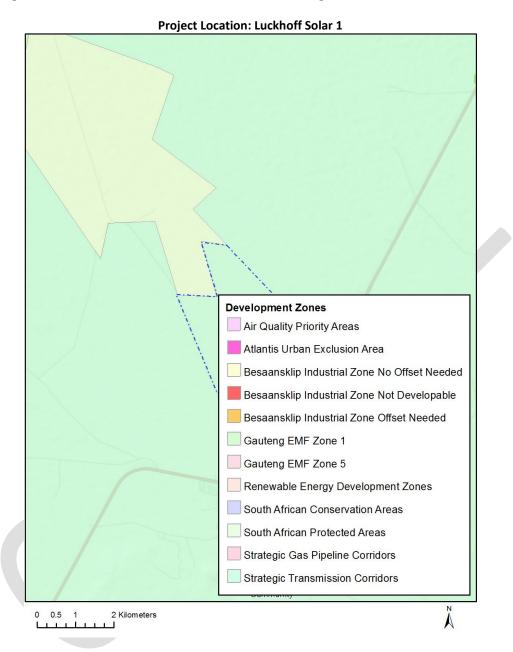
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

### 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.

Incenti	Implication
ve,	
restricti	
on or	
prohibi	
tion	
Strategic	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Com
Transmis	bined EGI.pdf
sion	
Corridor-	
Central	
corridor	
South	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPA
African	D OR 2022 Q2 Metadata.pdf
Protecte	
d Areas	

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



### 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			Χ	
Animal Species Theme			Χ	

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

### 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 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	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
6	Aquatic Biodiver sity	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf

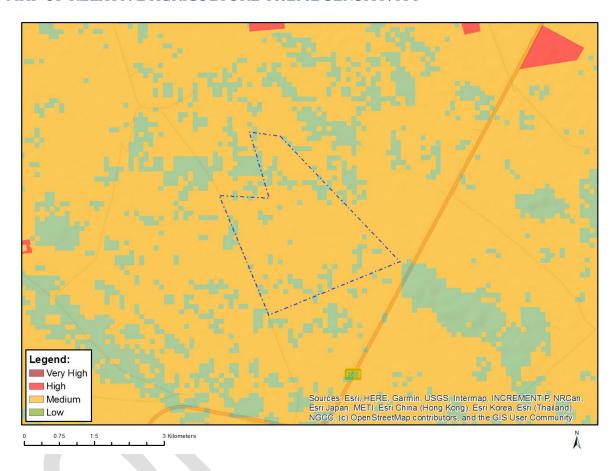
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7	Impact Assessm ent Civil Aviation Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Civil_Aviation_Installations_Assessment_Protocols.pdf
8	Defense Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /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 2	Socio- Economi c Assessm ent Plant	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted General Requirement Assessment Protocols.pdf  https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
2	Species Assessm ent	/Gazetted Plant Species Assessment Protocols.pdf
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.

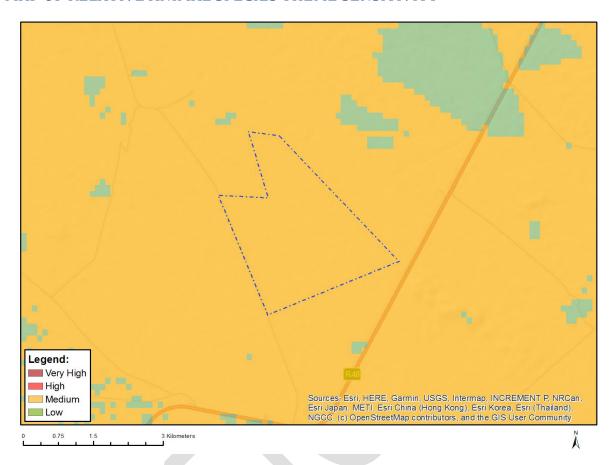
### MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Χ	

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

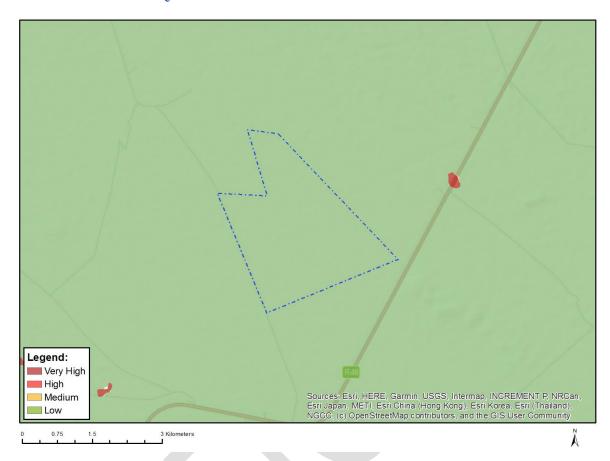


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at <a href="mailto:eiadatarequests@sanbi.org.za">eiadatarequests@sanbi.org.za</a> 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
		Х	

Sensitivity	Feature(s)
Medium	Aves-Neotis ludwigii

# MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

# 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	

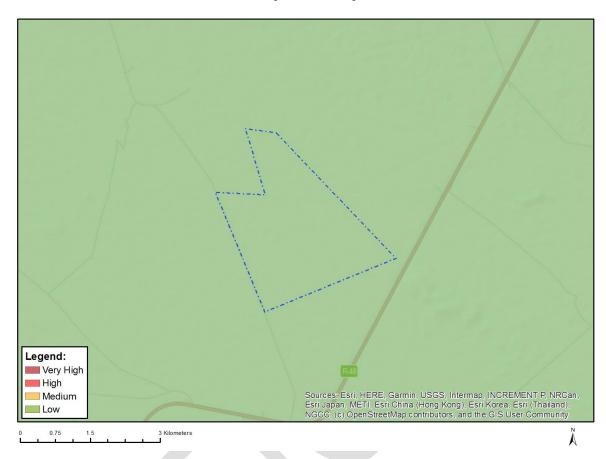
### MAP OF RELATIVE AVIAN THEME SENSITIVITY



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

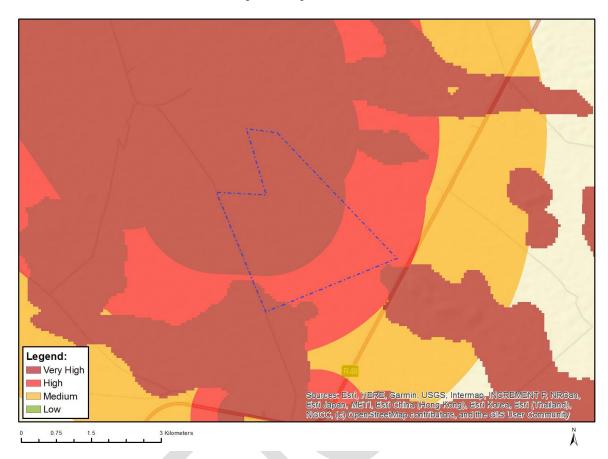
### MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

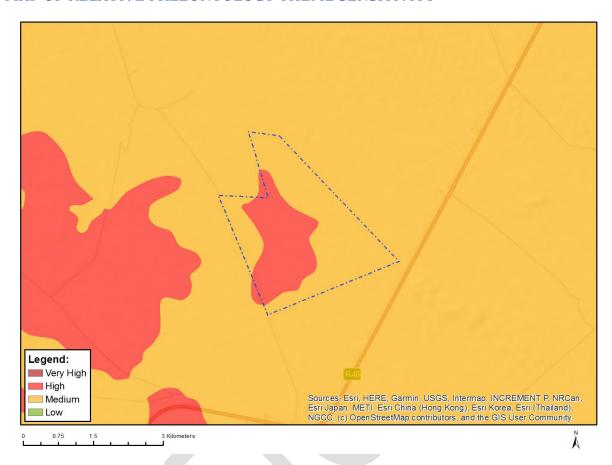
# MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
High	Between 1.5 and 3 km of a nature reserve
Medium	Between a and 2 km of a town or village
Very High	Mountain tops and high ridges
Very High	Nature Reserve
Very High	Within 1.5 km of a nature reserve

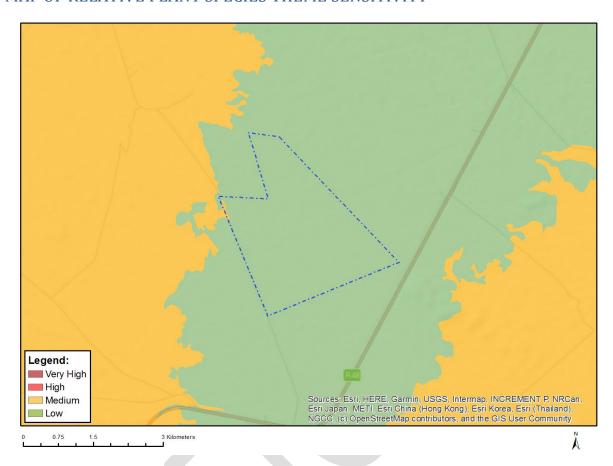
### MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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

### MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY

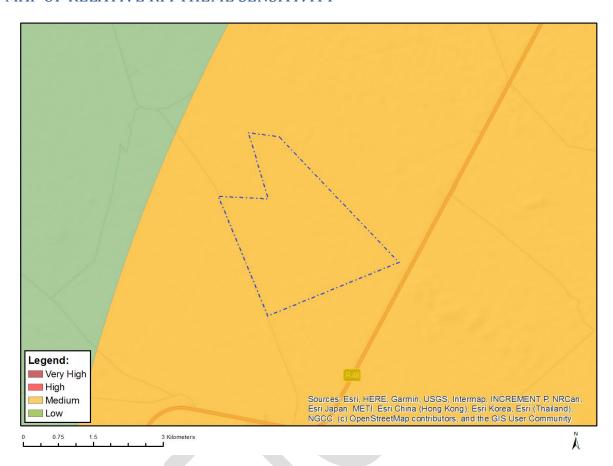


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Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Tridentea virescens

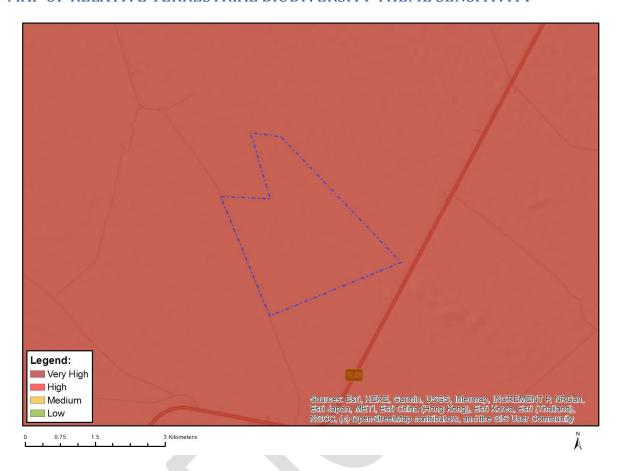
### MAP OF RELATIVE RFI THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		Х	

Sensitivity	Feature(s)
Medium	Between 14 and 32 km of a SKA receptor

### MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Ecological support area 1
Very High	Ecological support area 2
Very High	Thanda Tula Reserve