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

EIA Reference number: 14/12/16/3/3/2/2038

Project name: Vrede PV

Project title: Screening Tool Report - Vrede PV

Date screening report generated: 26/04/2021 09:04:33

Applicant: South Africa Mainstream Renewable Power Developments (Pty) Ltd

Compiler: Savannah Environmental (Pty) Ltd

Compiler signature:

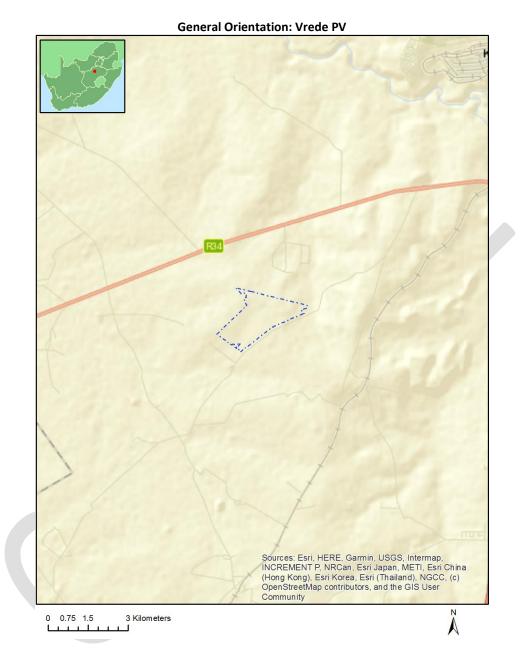
Application Category: Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV

Table of Contents

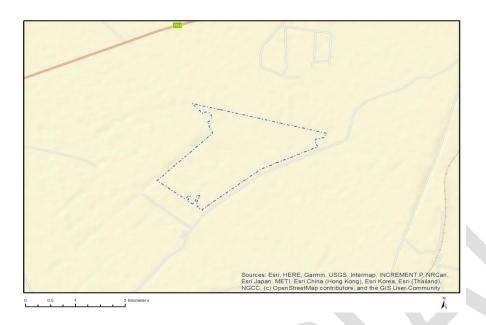
P	roposed Project Location	3
	Orientation map 1: General location	3
N	Nap of proposed site and relevant area(s)	4
	Cadastral details of the proposed site	4
	Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
	Environmental Management Frameworks relevant to the application	5
E	nvironmental screening results and assessment outcomes	5
	Relevant development incentives, restrictions, exclusions or prohibitions	5
re	Map indicating proposed development footprint within applicable development incentive, estriction, exclusion or prohibition zones	
	Proposed Development Area Environmental Sensitivity	
	Specialist assessments identified	7
R	esults of the environmental sensitivity of the proposed area	9
	MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	
	MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	
	MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	11
	MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	12
	MAP OF RELATIVE AVIAN THEME SENSITIVITY	13
	MAP OF RELATIVE BATS THEME SENSITIVITY	14
	MAP OF RELATIVE CIVIL AVIATION (SOLAR PV) THEME SENSITIVITY	15
	MAP OF RELATIVE DEFENCE THEME SENSITIVITY	16
	MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY	17
	MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	18
	MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	19
	MAP OF RELATIVE RFI THEME SENSITIVITY	20
	MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	21

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	UITVAL	1104	0	27°45'20.67S	27°8'3.93E	Farm
2	VLAKDAM	1152	0	27°44'42.3S	27°8'48.67E	Farm
3	UITVAL	1104	1	27°44'58.15S	27°8'9.56E	Farm Portion
4	VLAKDAM	1152	0	27°44'42.3S	27°8'48.67E	Farm Portion

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

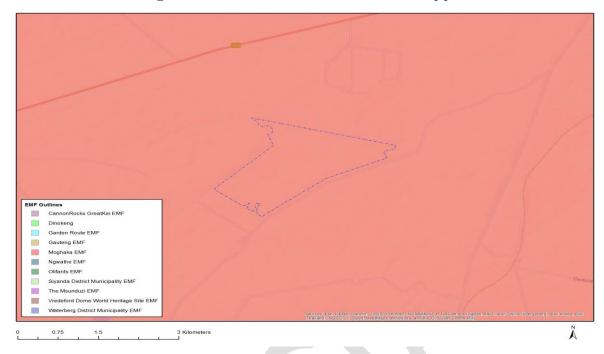
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

Page 4 of 21 <u>Disclaimer applies</u> 26/04/2021

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.

Environmental Management Frameworks relevant to the application



Environment al	LINK
Management	
Framework	
Moghaka EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Moqhaka_LM
	EMF - Final EMF Report Rev2013-06.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:

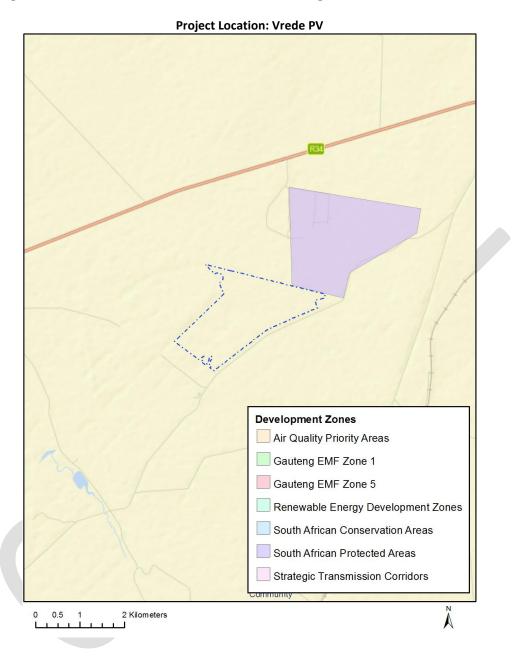
Utilities Infrastructure | Electricity | Generation | Renewable | Solar | PV.

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.

No intersection with any development zones found.

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		Х		
Animal Species Theme			Х	

Page 6 of 21 <u>Disclaimer applies</u> 26/04/2021

Aquatic Biodiversity Theme	X		
Archaeological and Cultural			Χ
Heritage Theme			
Avian Theme		Х	
Bats Theme			Х
Civil Aviation (Solar PV)			Х
Theme			
Defence Theme			Χ
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.

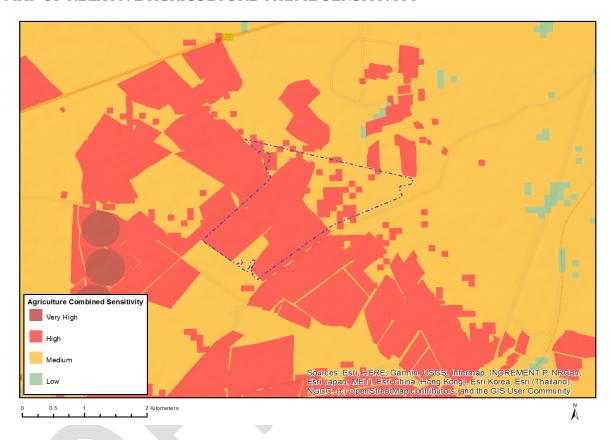
N	Special	Assessment Protocol	
0	ist		
	assess		
	ment		
1	Agricult ural Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted WindAndSolar Agriculture Assessment Protocols.pdf	
2	Landsca pe/Visu al Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted 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	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols	

	sity Impact Assessm ent	/Gazetted Aquatic Biodiversity Assessment Protocols.pdf
7	Avian Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf
8	Civil Aviation Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols /Gazetted Civil Aviation Installations Assessment Protocols.pdf
9	Defense Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_Defence_Installations_Assessment_Protocols.pdf
1 0	RFI Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/ /Gazetted_General_Requirement_Assessment_Protocols.pdf
1 1	Geotech nical Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
1 2	Socio- Economi c Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf
1 3	Plant Species Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
1 4	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.

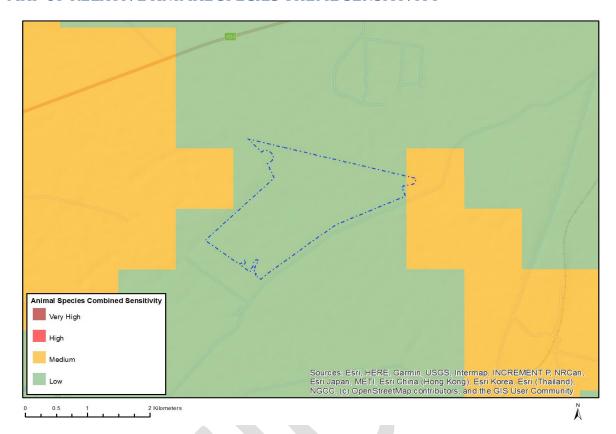
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

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

MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

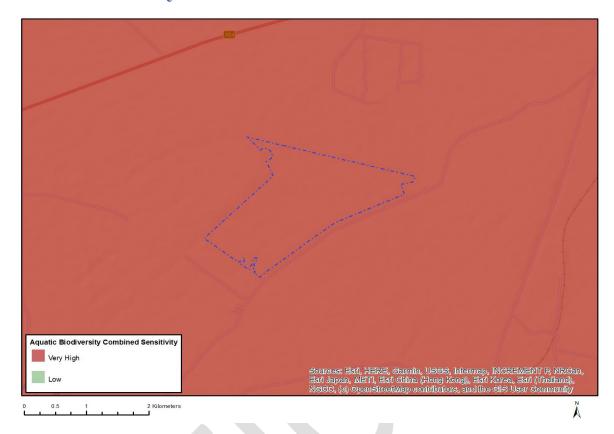


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their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

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Feature(s)		
Very High	Strategic water source area	
Very High	Wetlands and Estuaries	

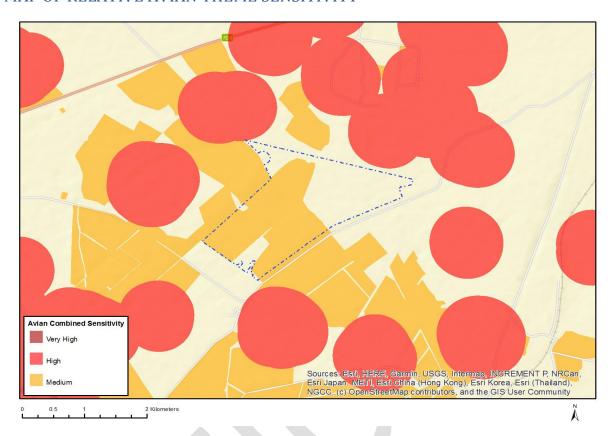
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

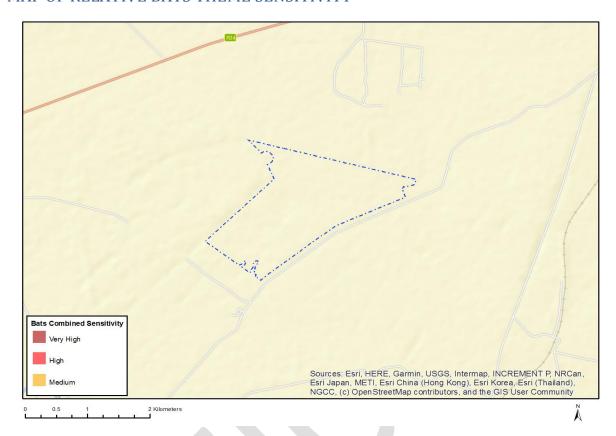
MAP OF RELATIVE AVIAN THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity Feature(s)	
High	Within 500 m of a wetland
Medium	Croplands

MAP OF RELATIVE BATS 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

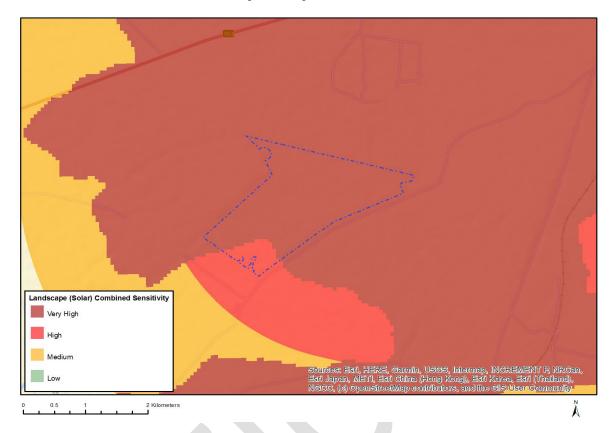
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

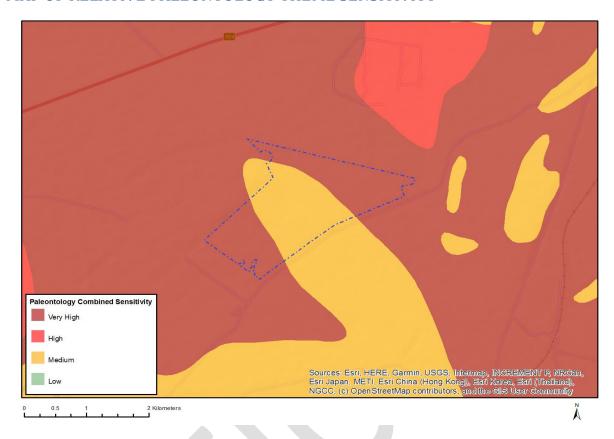
MAP OF RELATIVE LANDSCAPE (SOLAR) THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)		
High	Between 1.5 and 3 km of a nature reserve		
Very High	Mountain tops and high ridges		
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)
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	ry High sensitivity High 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
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

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	Critical Biodiversity Area 1	
Very High	Focus Areas for land-based protected areas expansion	
Very High	Endangered ecosystem	

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

EIA Reference number: Tba

Project name: Vrede Grid Option 1Project title: Vrede Grid Option 1

Date screening report generated: 04/08/2021 15:47:49

Applicant: South Africa Mainstream Renewable Power Developments (Pty) Ltd

Compiler: Savannah Environmental (Pty) Ltd

Compiler signature:

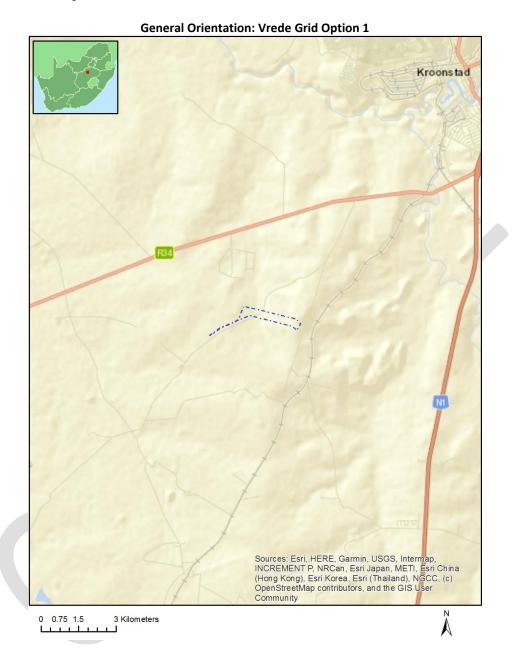
Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline

Table of Contents

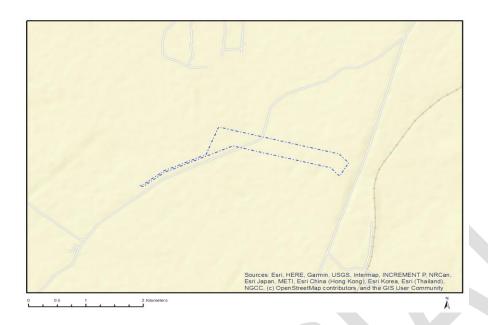
Proposed Project Location	3
Orientation map 1: General location	3
Map of proposed site and relevant area(s)	4
Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
Environmental Management Frameworks relevant to the application	5
Environmental screening results and assessment outcomes	5
Relevant development incentives, restrictions, exclusions or prohibitions	5
Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones	
Proposed Development Area Environmental Sensitivity	
Specialist assessments identified	
Results of the environmental sensitivity of the proposed area	
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	10
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	11
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	12
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY	13
MAP OF RELATIVE DEFENCE THEME SENSITIVITY	14
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	15
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	16
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	. 17

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	THORNLANDS	2287	0	27°44'11.43S	27°10'5.88E	Farm
2	VLAKDAM	1152	0	27°44'42.3S	27°8'48.67E	Farm
3	GESUKKEL	1153	0	27°45'5.86S	27°9'51.88E	Farm
4	GESUKKEL	1153	0	27°45'5.87S	27°9'51.84E	Farm Portion
5	VLAKDAM	1152	0	27°44'42.3S	27°8'48.67E	Farm Portion
6	THORNLANDS	2287	0	27°44'11.43S	27°10'5.88E	Farm Portion

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

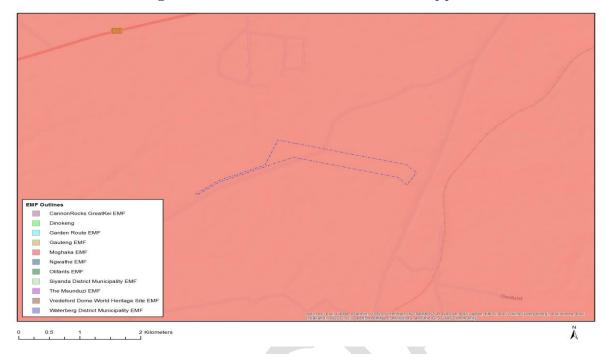
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

Page 4 of 17 <u>Disclaimer applies</u> 04/08/2021

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.

Environmental Management Frameworks relevant to the application



Environment al	LINK
Management	
Framework	
Moghaka EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Moqhaka_LM
	EMF - Final EMF Report Rev2013-06.pdf

Environmental screening results and assessment outcomes

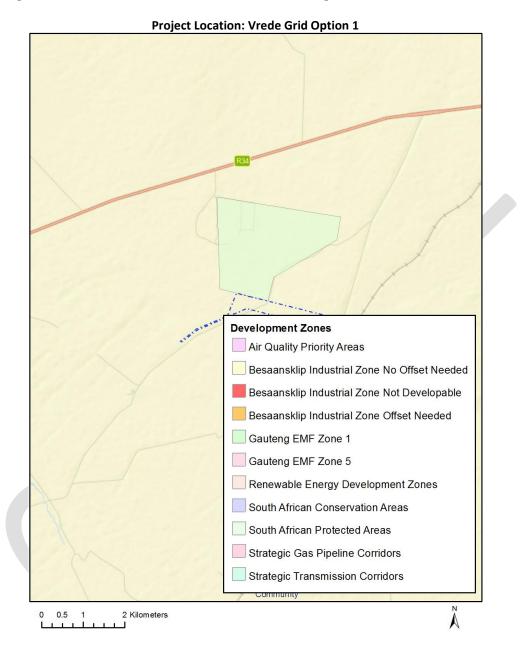
The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification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

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.

Implication
https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPA
D OR 2021 Q1 Metadata.pdf

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.

	sensitivity	sensitivity	sensitivity	sensitivity
Agriculture Theme		Х		
Animal Species Theme			Х	
Aquatic Biodiversity Theme	Х			
Archaeological and Cultural				Х
Heritage Theme				
Civil Aviation Theme			Х	
Defence Theme				Х
Paleontology Theme	Х			
Plant Species 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.

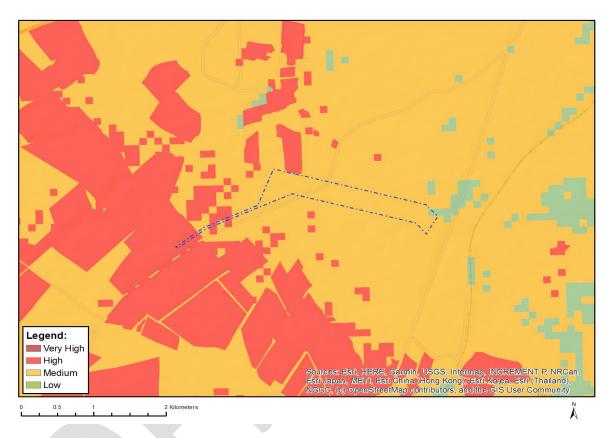
N	Special	Assessment Protocol
О	ist	
	assess	
	ment	
1	Agricult ural Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
2	Landsca pe/Visu al Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted 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

	Impact	
	Assessm	
	ent	
7	Avian	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
	Impact	/Gazetted Avifauna Assessment Protocols.pdf
	Assessm	
	ent	
8	Civil	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
	Aviation	/Gazetted Civil Aviation Installations Assessment Protocols.pdf
	Assessm	
	ent	
9	RFI	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
	Assessm	/Gazetted General Requirement Assessment Protocols.pdf
	ent	,
1	Geotech	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
0	nical	/Gazetted General Requirement Assessment Protocols.pdf
	Assessm	
	ent	
1	Plant	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
1	Species	/Gazetted Plant Species Assessment Protocols.pdf
	Assessm	
	ent	
1	Animal	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols
2	Species	/Gazetted Animal Species Assessment Protocols.pdf
	Assessm	7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5
	ent	

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.

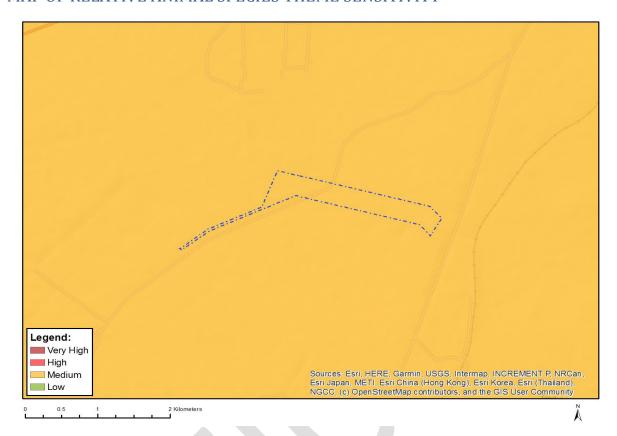
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

Sensitivity	Feature(s)
High	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
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

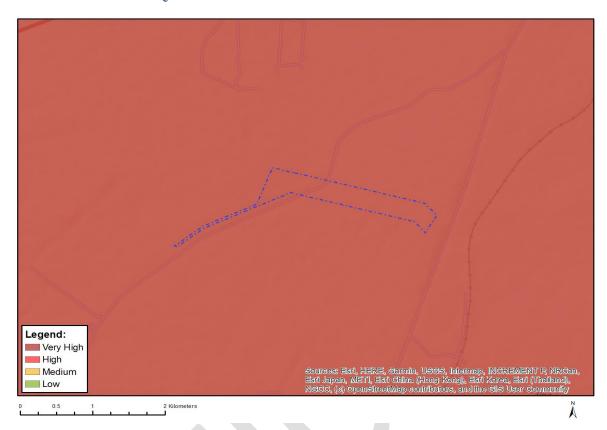


Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at eiadatarequests@sanbi.org.za listing all sensitive species with their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

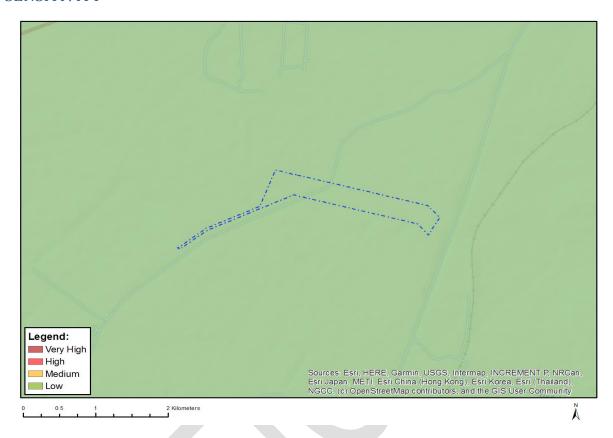
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)	
Very High	Strategic water source area	

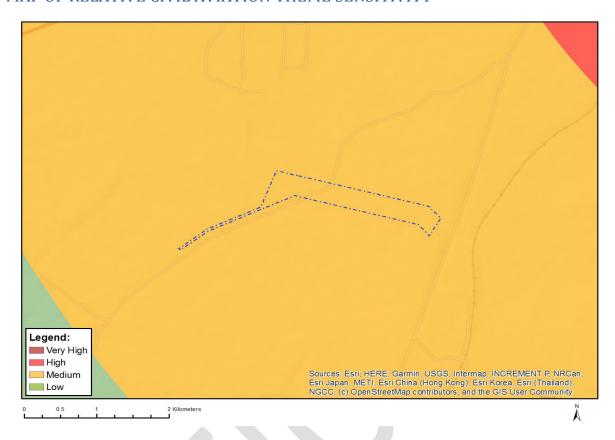
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

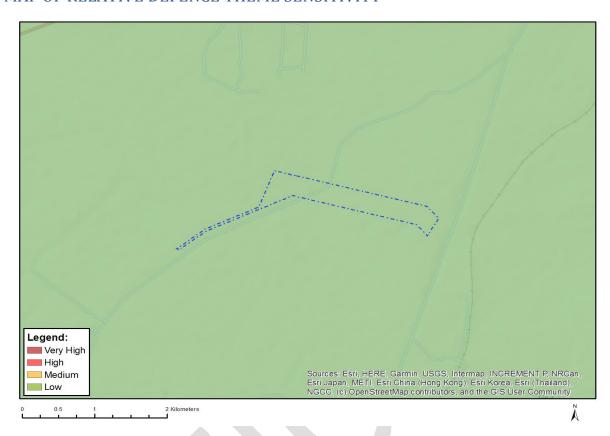
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

I	Sensitivity	Feature(s)
	Medium	Between 8 and 15 km of other civil aviation aerodrome

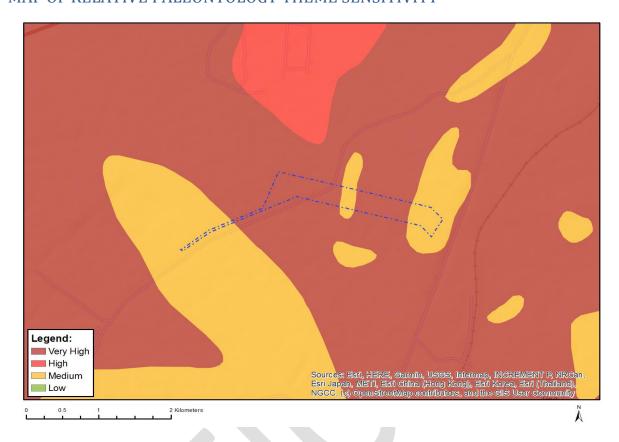
MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low Sensitivity	

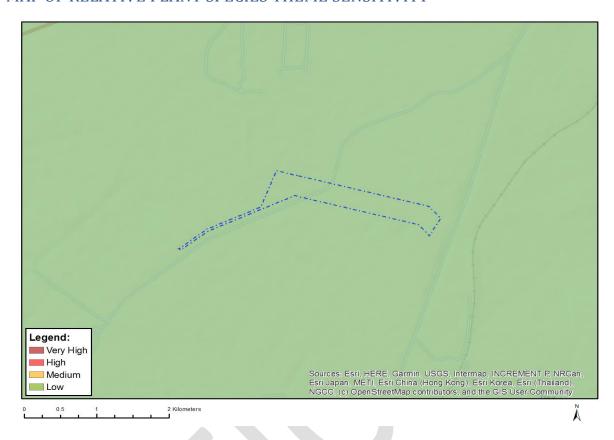
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



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 TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Critical Biodiversity Area 1
Very High	Ecological Support Area 1
Very High	Focus Areas for land-based protected areas expansion
Very High	Endangered ecosystem
Very High	South African Protected Areas

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

EIA Reference number: Tba

Project name: Vrede Grid Option 2Project title: Vrede Grid Option 2

Date screening report generated: 04/08/2021 15:59:47

Applicant: South Africa Mainstream Renewable Power Developments (Pty) Ltd

Compiler: Savannah Environmental (Pty) Ltd

Compiler signature:

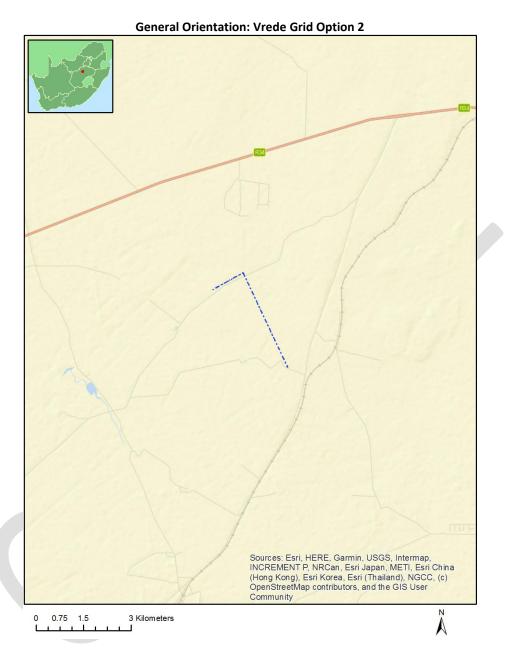
Application Category: Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline

Table of Contents

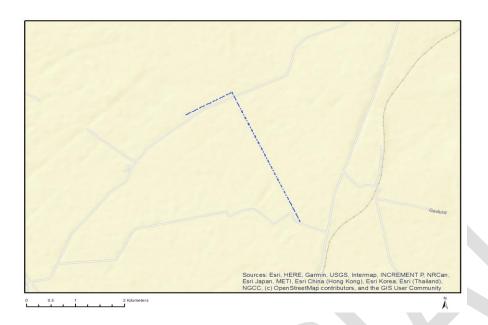
Proposed Project Location	3
Orientation map 1: General location	3
Map of proposed site and relevant area(s)	4
Cadastral details of the proposed site	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area	4
Environmental Management Frameworks relevant to the application	5
Environmental screening results and assessment outcomes	5
Relevant development incentives, restrictions, exclusions or prohibitions	5
Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones	
Proposed Development Area Environmental Sensitivity	
Specialist assessments identified	
Results of the environmental sensitivity of the proposed area	
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY	
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY	10
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY	11
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY	12
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY	13
MAP OF RELATIVE DEFENCE THEME SENSITIVITY	14
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY	15
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY	16
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY	. 17

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	GESUKKEL	1153	0	27°45'5.86S	27°9'51.88E	Farm
2	VLAKDAM	1152	0	27°44'42.3S	27°8'48.67E	Farm
3	GESUKKEL	1153	0	27°45'5.87S	27°9'51.84E	Farm Portion
4	VLAKDAM	1152	0	27°44'42.3S	27°8'48.67E	Farm Portion
5	GEDULD	1156	0	27°45'39.6S	27°10'15.14E	Farm Portion

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

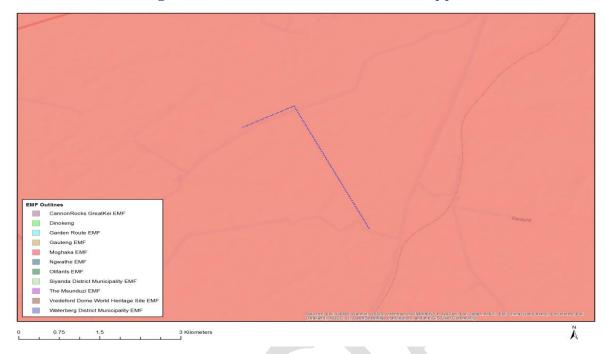
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

Page 4 of 17 <u>Disclaimer applies</u> 04/08/2021

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.

Environmental Management Frameworks relevant to the application



Environment al	LINK
Management	
Framework	
Moghaka EMF	https://screening.environment.gov.za/ScreeningDownloads/EMF/Moqhaka_LM
	EMF - Final EMF Report Rev2013-06.pdf

Environmental screening results and assessment outcomes

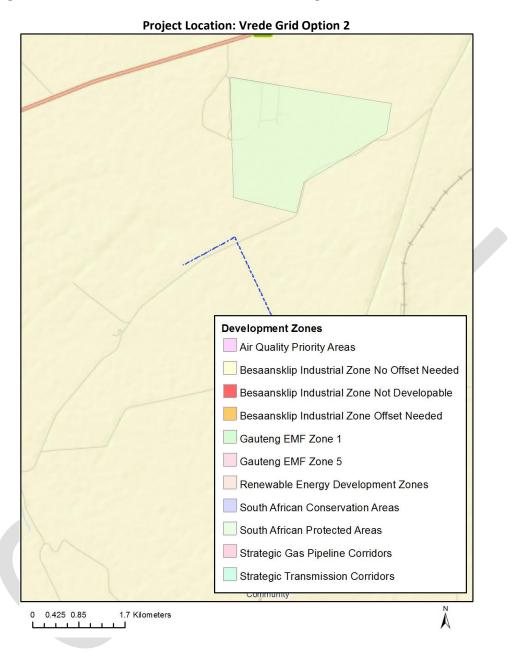
The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification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

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.

No intersection with any development zones found.

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		Х		
Animal Species Theme			Х	

Page 6 of 17 <u>Disclaimer applies</u> 04/08/2021

Aquatic Biodiversity Theme	Χ		
Archaeological and Cultural			Х
Heritage Theme			
Civil Aviation Theme		Χ	
Defence Theme			Х
Paleontology Theme	Х		
Plant Species 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 o	Special ist	Assessment Protocol
	assess ment	
1	Agricult ural Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General 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 Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Aquatic Biodiversity Assessment Protocols.pdf

7	Avian Impact Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Avifauna_Assessment_Protocols.pdf
8	Civil Aviation Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Civil Aviation 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	Plant Species Assessm ent	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
1 2	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.

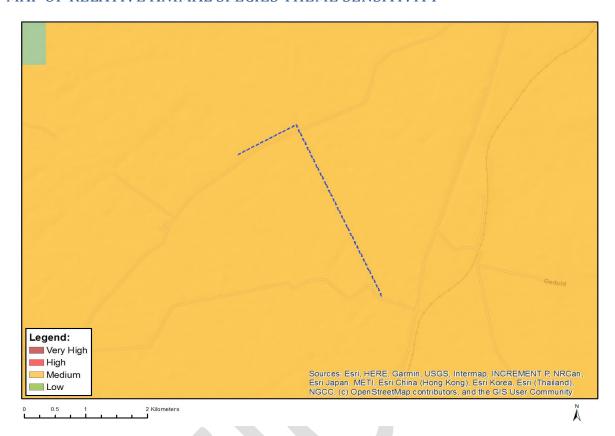
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	Х		

Sensitivity	Feature(s)
High	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

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)
Medium	Reptilia-Smaug giganteus

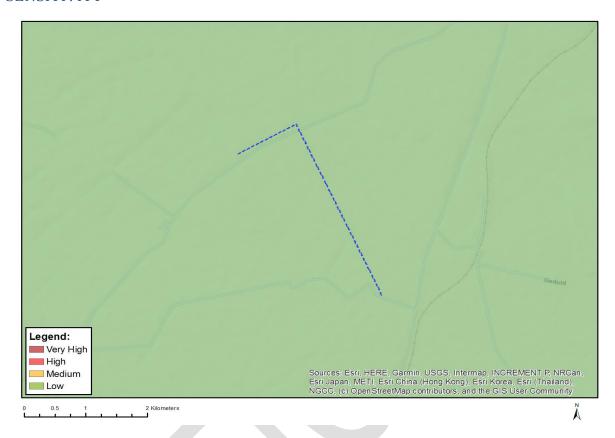
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
ſ	X			

Sensitivity	Feature(s)
Very High	Strategic water source area

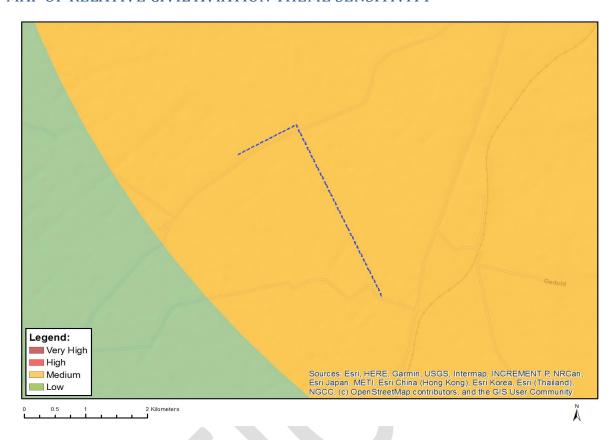
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			Χ

Sensitivity	Feature(s)	
Low	Low sensitivity	

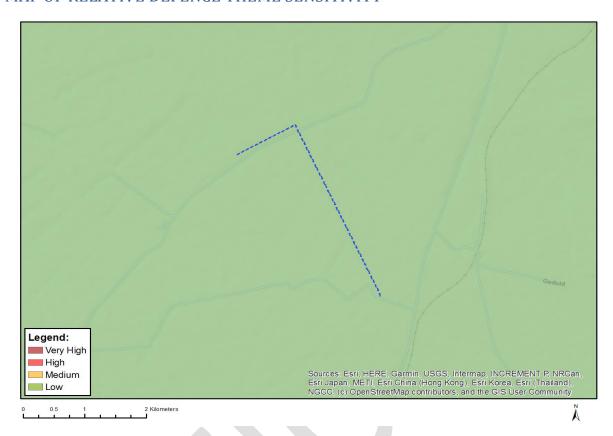
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity	Feature(s)
Medium	Between 8 and 15 km of other civil aviation aerodrome

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 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 TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity	Feature(s)
Very High	Critical Biodiversity Area 1
Very High	Endangered ecosystem