

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

**EIA Reference number:** TBC

**Project name:** Orkney Solar Farm Grid Infrastructure

**Project title:** The Proposed Establishment of a 132kV Power Line from the Authorised Orkney Solar Farm Substation to the existing Vaal Reefs Ten Substation

**Date screening report generated:** 03/05/2022 09:18:09

**Applicant:** Genesis – Eco-Energy Developments (Pty) Ltd

**Compiler:** Savannah Environmental (Pty) Ltd

**Compiler signature:**  
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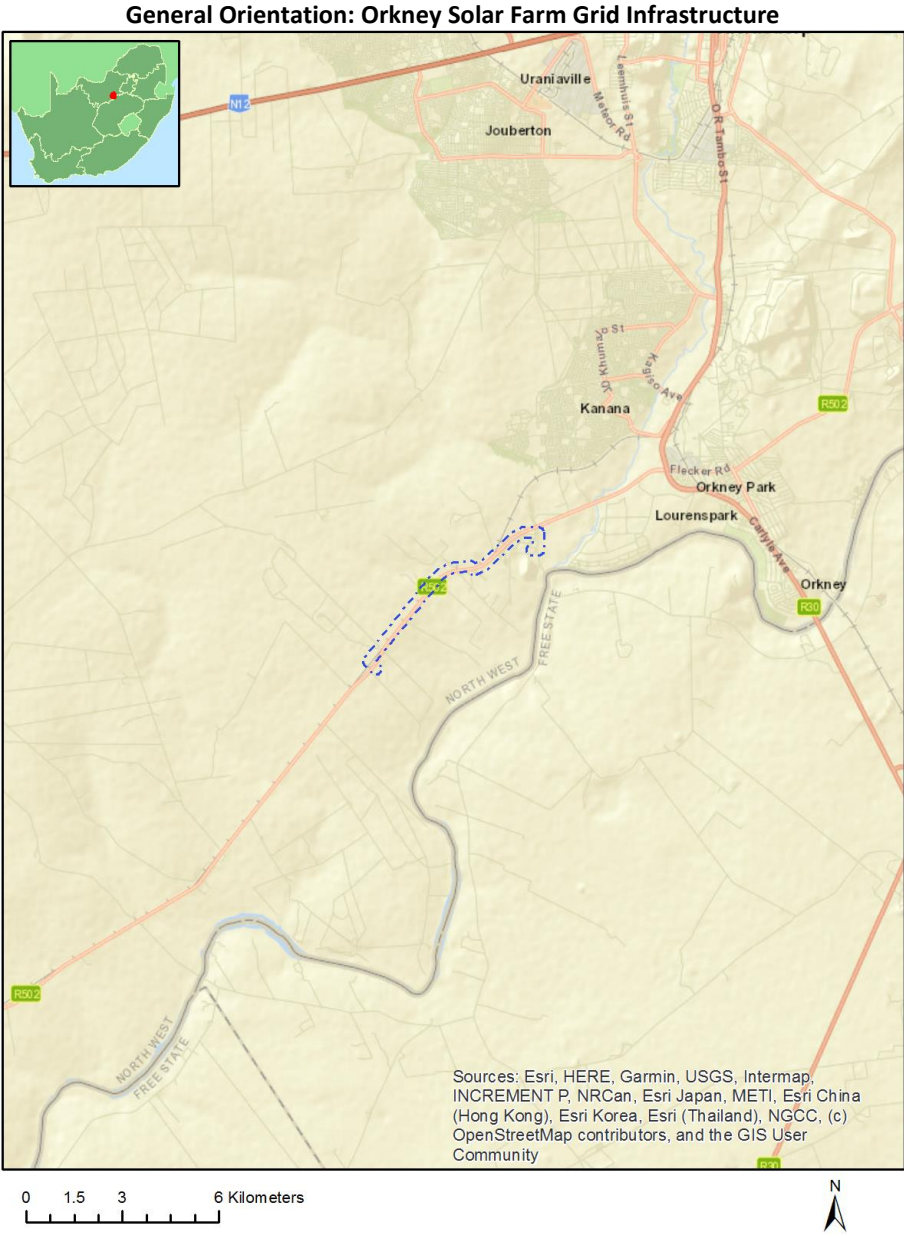
**Application Category:** Utilities Infrastructure | Electricity | Distribution and Transmission | Powerline

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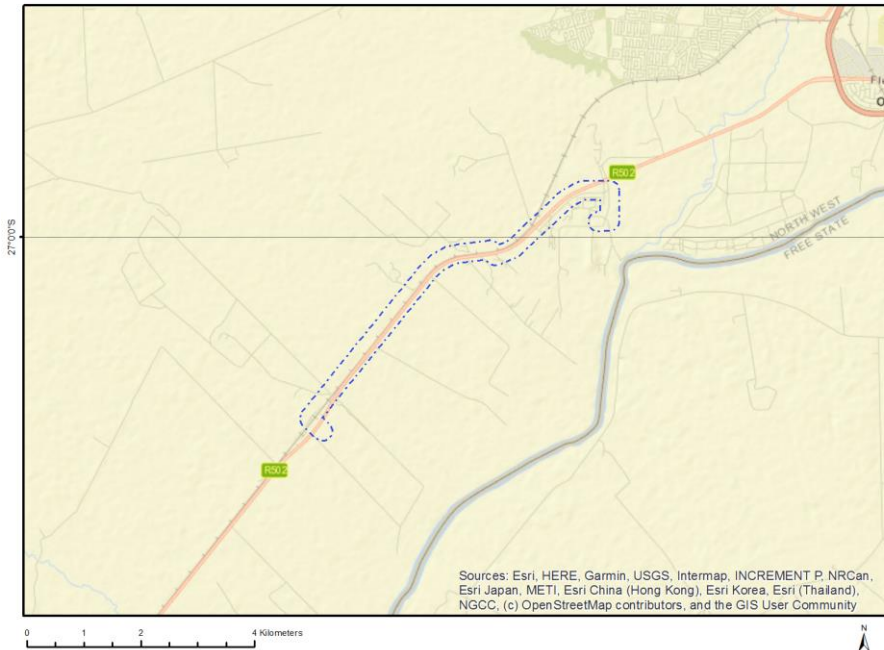
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# Proposed Project Location

## 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	WOLVEHUIS	114	0	27°2'58.81S	26°33'16.48E	Farm
2	GOEDGENOEG	433	0	27°0'0.85S	26°36'6.23E	Farm
3	GOEDGENOEG	433	33	27°0'21.15S	26°34'54.85E	Farm Portion
4	GOEDGENOEG	433	17	27°0'14.67S	26°35'22.39E	Farm Portion
5	GOEDGENOEG	433	24	27°0'37.28S	26°33'51.76E	Farm Portion
6	GOEDGENOEG	433	65	26°59'55.38S	26°36'9.77E	Farm Portion
7	GOEDGENOEG	433	51	27°0'19.97S	26°35'31.42E	Farm Portion
8	GOEDGENOEG	433	63	27°0'13.16S	26°35'24.47E	Farm Portion
9	GOEDGENOEG	433	61	27°0'50.31S	26°34'47.12E	Farm Portion
10	GOEDGENOEG	433	27	26°59'45.87S	26°37'0.25E	Farm Portion
11	GOEDGENOEG	433	15	26°59'44.33S	26°35'55.92E	Farm Portion
12	GOEDGENOEG	433	60	27°1'10.47S	26°34'29.14E	Farm Portion
13	GOEDGENOEG	433	12	27°0'9.43S	26°34'0.17E	Farm Portion
14	GOEDGENOEG	433	53	27°0'15.82S	26°35'26.37E	Farm Portion
15	WOLVEHUIS	114	28	27°1'22.74S	26°34'17.99E	Farm Portion
16	GOEDGENOEG	433	62	27°0'29.53S	26°35'5.65E	Farm Portion
17	GOEDGENOEG	433	81	26°59'42.8S	26°34'54.39E	Farm Portion
18	GOEDGENOEG	433	31	27°0'16.71S	26°36'36.28E	Farm Portion
19	WOLVEHUIS	114	21	27°2'11.46S	26°34'39.64E	Farm Portion
20	GOEDGENOEG	433	11	27°1'40.45S	26°35'3.67E	Farm Portion
21	GOEDGENOEG	433	36	27°0'19.81S	26°35'50.53E	Farm Portion
22	GOEDGENOEG	433	47	27°0'17.17S	26°35'58.15E	Farm Portion
23	WOLVEHUIS	114	9	27°1'36.91S	26°34'5.54E	Farm Portion
24	GOEDGENOEG	433	89	26°59'30.02S	26°36'40.98E	Farm Portion
25	GOEDGENOEG	433	64	27°0'8.49S	26°35'43.38E	Farm Portion
26	WOLVEHUIS	114	8	27°1'31.81S	26°34'6.87E	Farm Portion
27	WOLVEHUIS	114	20	27°1'16.82S	26°33'39.77E	Farm Portion

Development footprint<sup>1</sup> 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	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	12/12/20/2513/3	Solar PV	Approved	6.6
2	14/12/16/3/3/2/777	Solar PV	Approved	24.8
3	12/12/20/2513/1	Solar PV	Approved	6.6
4	12/12/20/2513/2	Solar PV	Approved	13.3
5	14/12/16/3/3/2/954	Solar PV	Approved	0
6	14/12/16/3/3/1/1519	Solar PV	Approved	24.5
7	12/12/20/2513/1/AM3	Solar PV	Approved	6.6
8	12/12/20/2513/4	Solar PV	Approved	6.6
9	14/12/16/3/3/2/778	Solar PV	Approved	27.2

## 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 | 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.

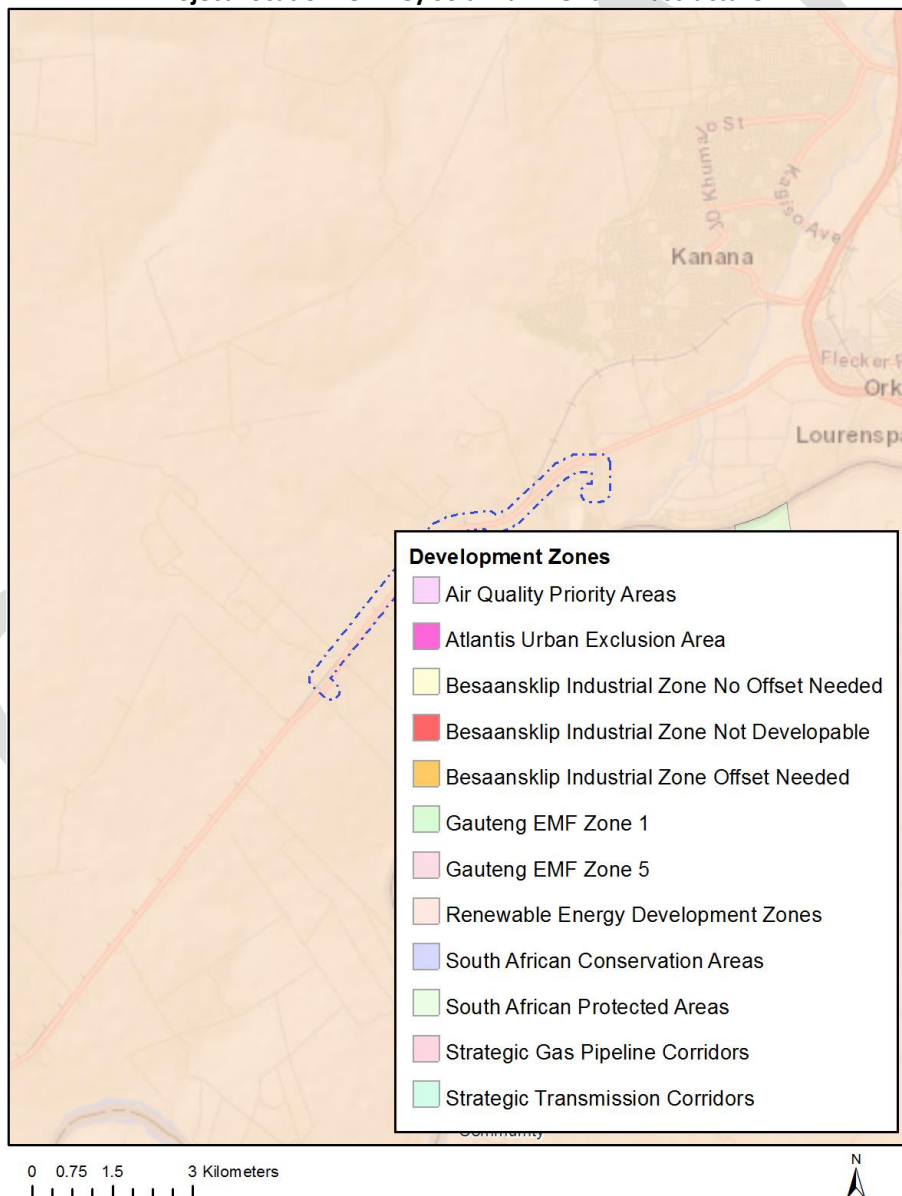
Incentive, restriction or prohibition	Implication

<sup>1</sup> “development footprint”, means the area within the site on which the development will take place and includes 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.

Strategic Transmission Corridor-Central corridor	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_EGI.pdf</a>
Renewable energy development zones 10-Klerksdorp	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_REDZ.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_REDZ.pdf</a>

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

**Project Location: Orkney Solar Farm Grid Infrastructure**



## 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			X	
Animal Species Theme				
Aquatic Biodiversity Theme				
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme		X		
Defence Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme				

## 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.

No	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf</a>
2	Landscapes/Visual Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
4	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
5	Terrestrial	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols</a>



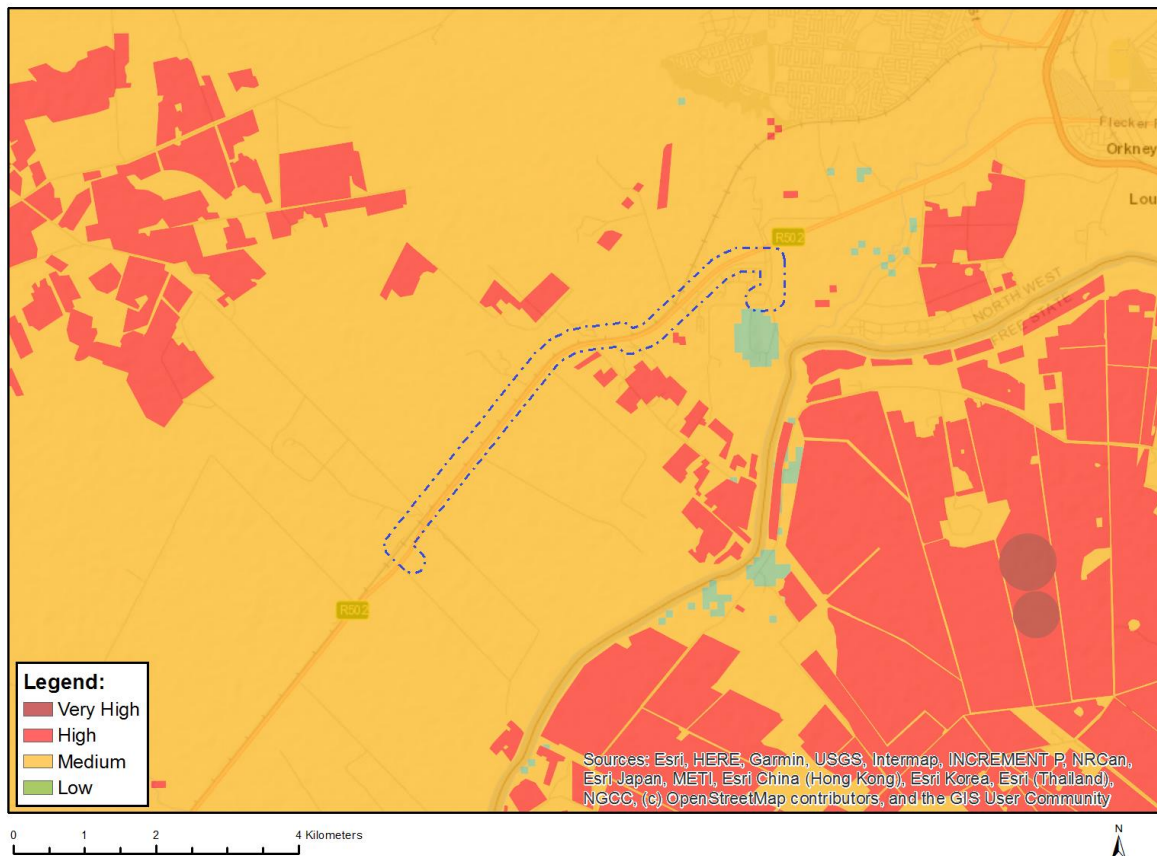
	Biodiversity Impact Assessment	<a href="#">/Gazetted Terrestrial Biodiversity Assessment Protocols.pdf</a>
6	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Aquatic Biodiversity Assessment Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Aquatic Biodiversity Assessment Protocols.pdf</a>
7	Avian Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Avifauna Assessment Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Avifauna Assessment Protocols.pdf</a>
8	Civil Aviation Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Civil Aviation Installations Assessment Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Civil Aviation Installations Assessment Protocols.pdf</a>
9	RFI Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
10	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted General Requirement Assessment Protocols.pdf</a>
11	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Plant Species Assessment Protocols.pdf</a>
12	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species Assessment Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted Animal Species Assessment Protocols.pdf</a>



## 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

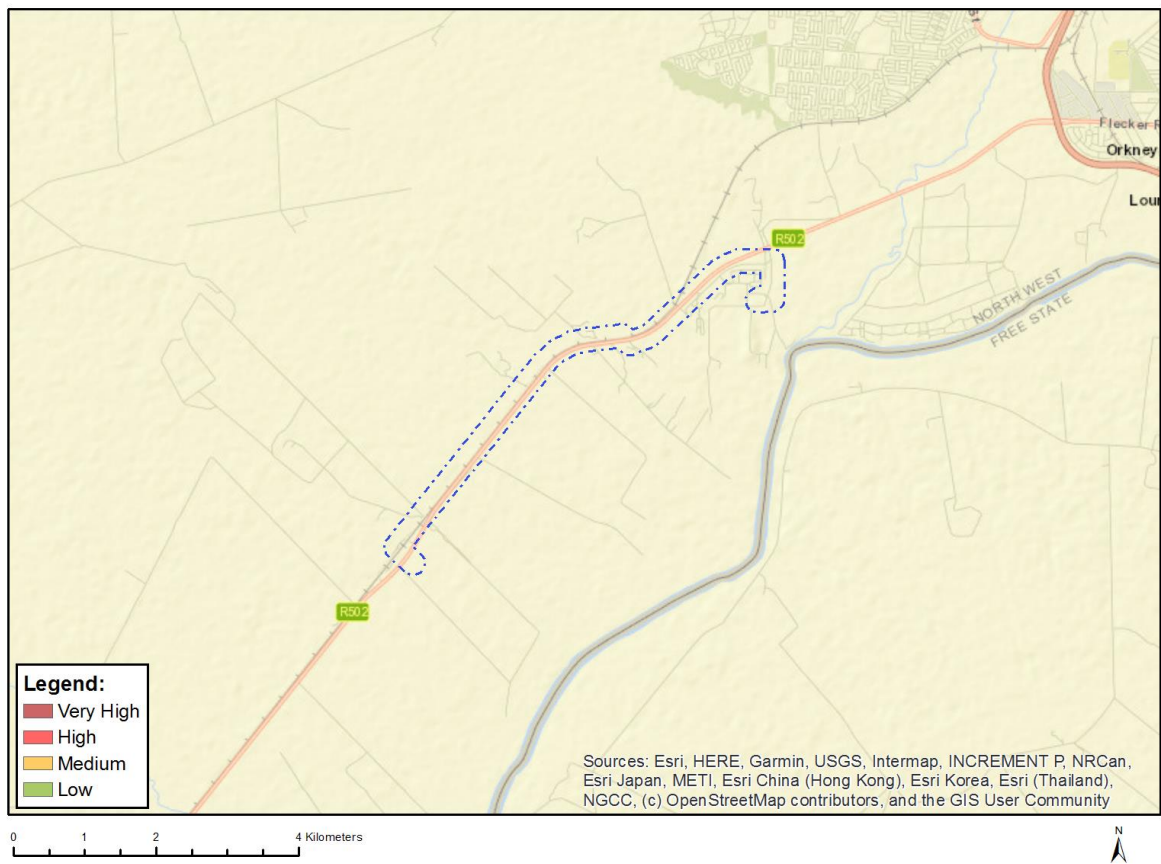


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

#### Sensitivity Features:

Sensitivity	Feature(s)
Low	
Medium	

## 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](mailto: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

### Sensitivity Features:

No sensitivity features found.

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

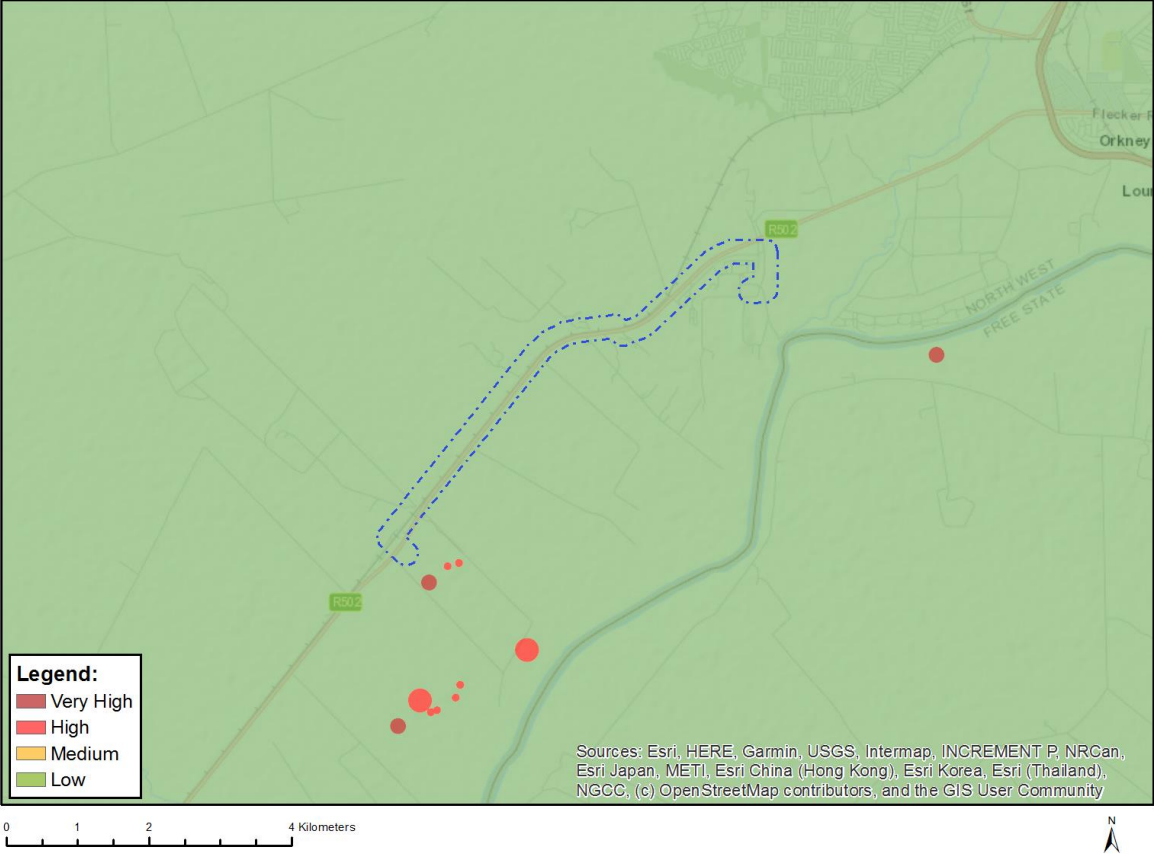


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity

### Sensitivity Features:

Sensitivity	Feature(s)
	Low sensitivity
	Aquatic CBAs
	Wetlands and Estuaries

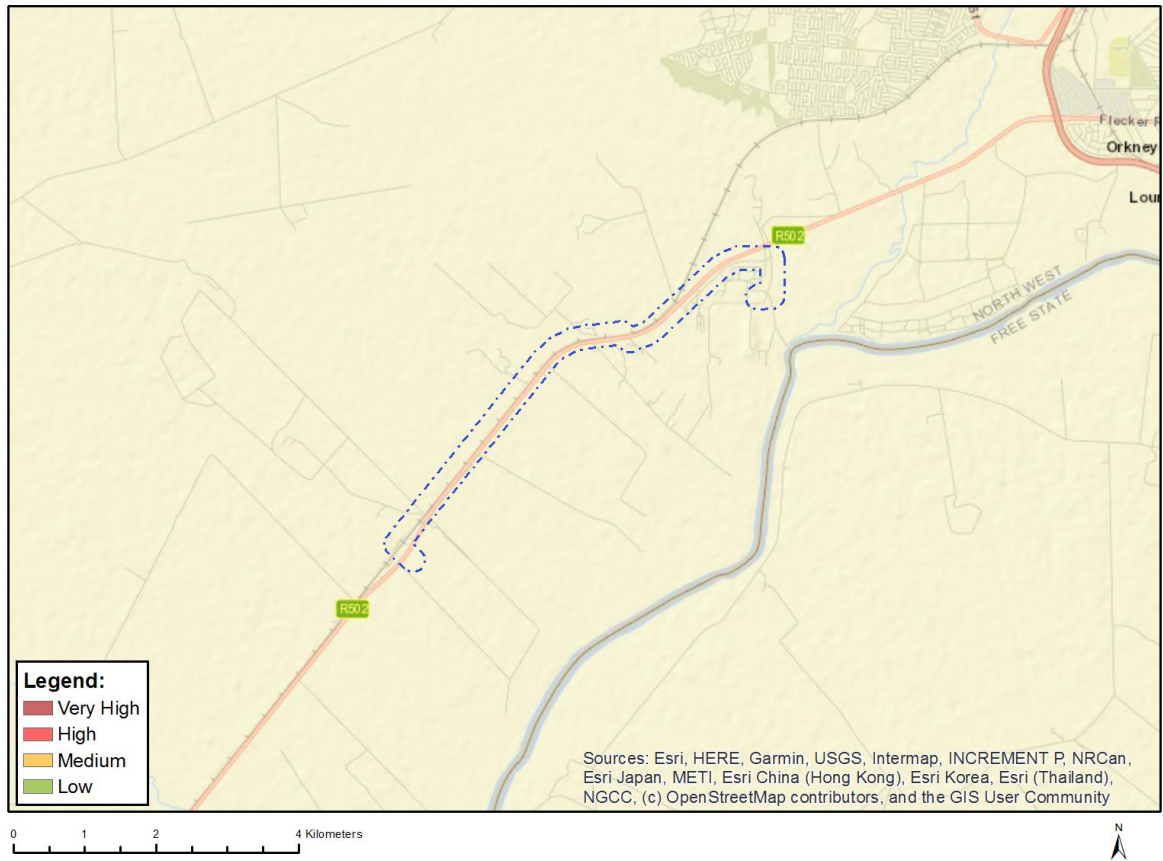
# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

**Sensitivity Features:**  
No sensitivity features found.

# MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



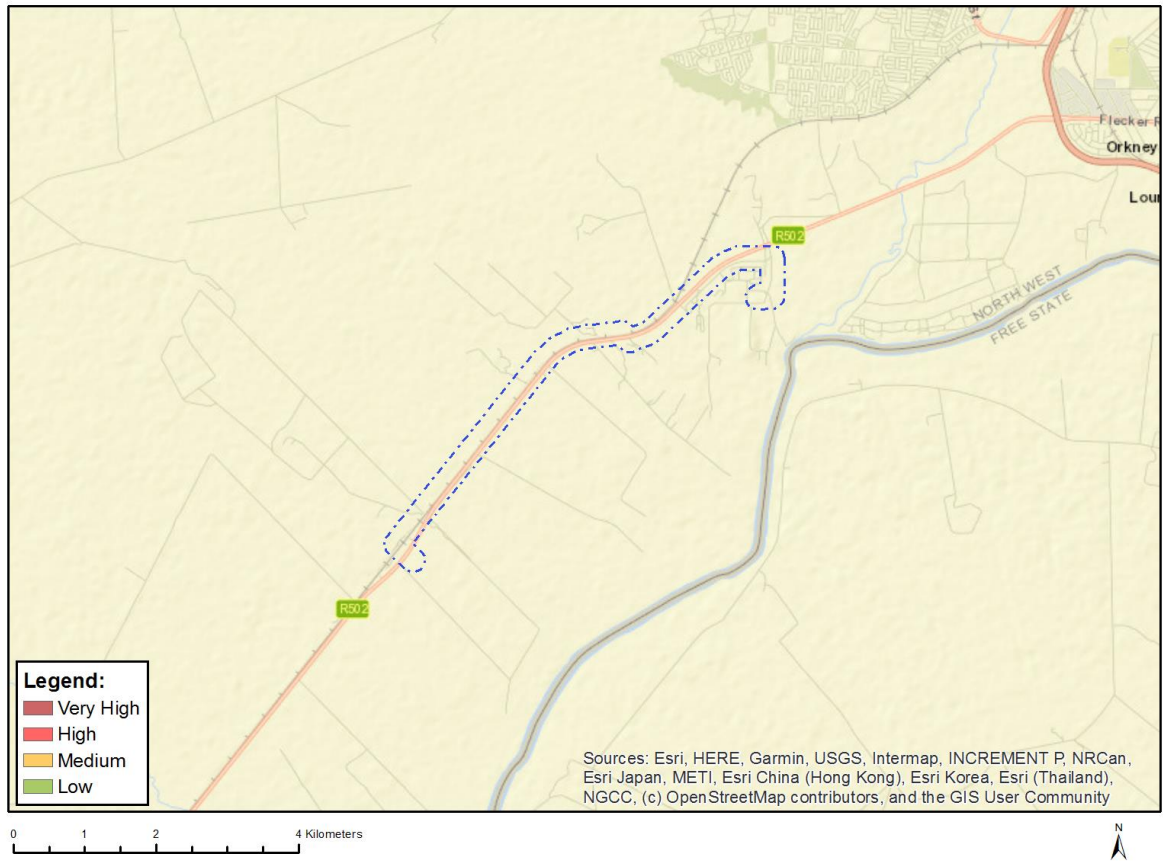
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

## Sensitivity Features:

Sensitivity	Feature(s)
High	
Medium	



## MAP OF RELATIVE DEFENCE THEME SENSITIVITY

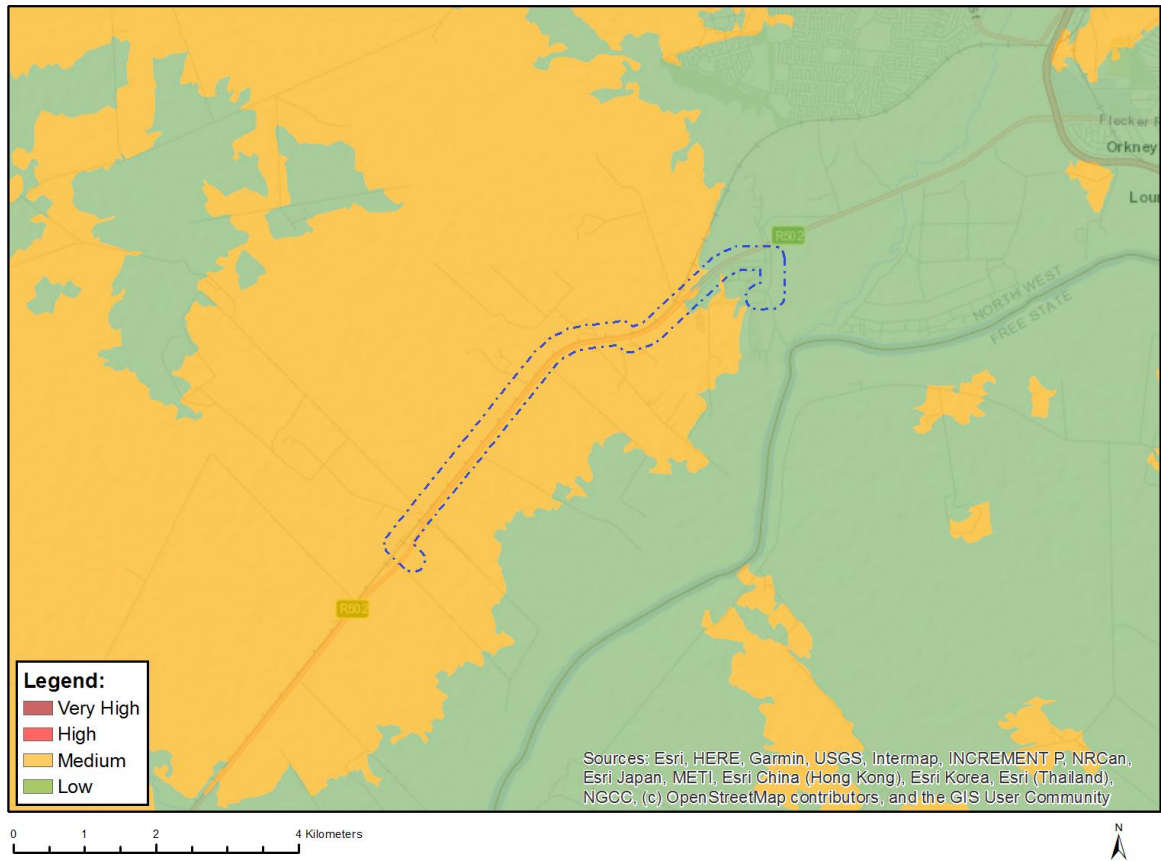


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

No sensitivity features found.

## 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](mailto: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.

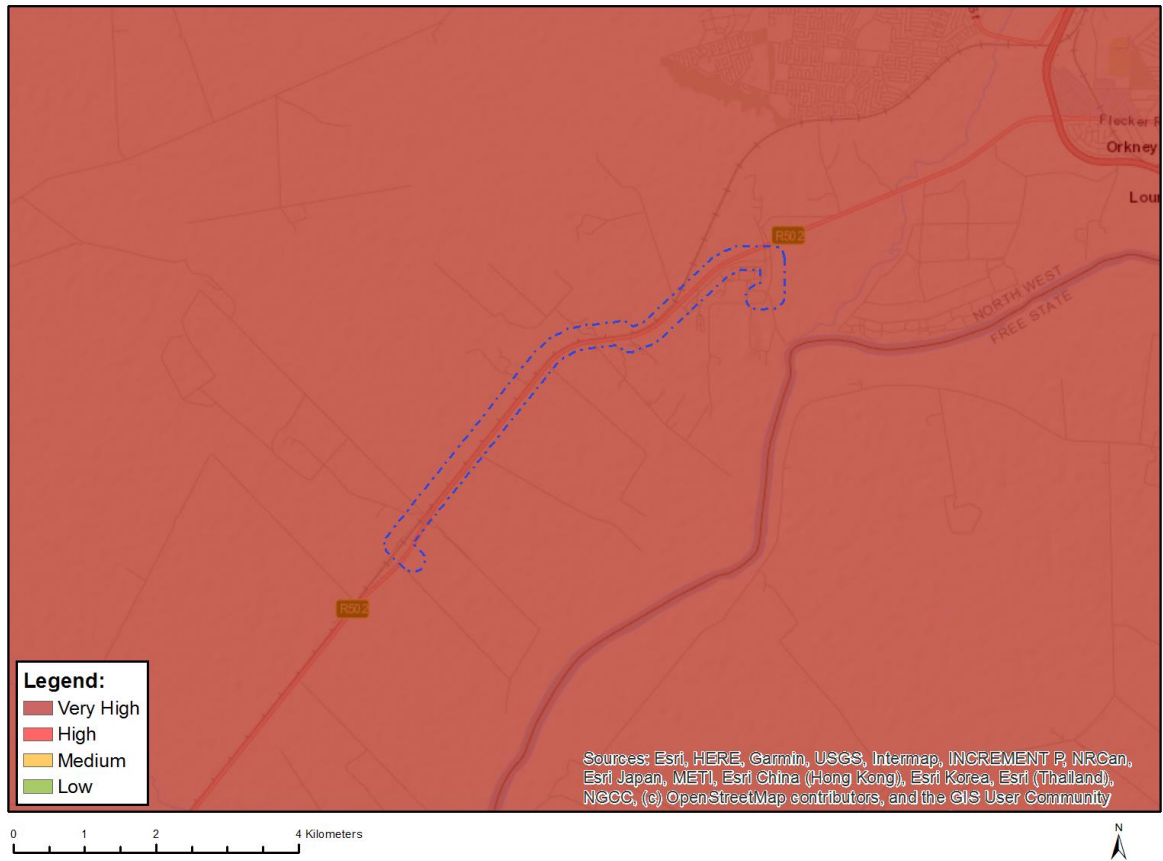
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Sensitive species 1261



## MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity

### Sensitivity Features:

Sensitivity	Feature(s)
	Critical biodiversity area 2
	Ecological support area 1
	Protected Areas Expansion Strategy
	Endangered ecosystem